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ABSTRACT

This report is the most current installment in the series on professional and occupational practice requirements in the state of Pennsylvania. It is part of a study of licensing and continuing education requirements of 75 occupations. All information on the professions and occupations addressed earlier has been revised as necessary to reflect changes in legislation, certification requirements, and other pertinent material. Following a discussion of the methodology of obtaining the occupational information, the report contains summaries of 66 professions and occupations. In addition to outlining the requirements for individuals wishing to obtain mandatory or voluntary credentials, the summaries provide background information on the development of the profession or occupation and material on current trends within the field. A section on the climate for continuing education has been included in each summary to give continuing educators an overview of the group's perceived need for and interest in continuing education programs. In addition, synopses of educational and licensing requirements for nine other occupations is presented. The primary function of the summaries and synopses is to assist the continuing educator in identifying those professions and occupations warranting further exploration as continuing professional education target groups. The material will be expanded and updated periodically. (KC)

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PROFESSIONAL AND OCCUPATIONAL PRACTICE REQUIREMENTS

A Continuing Professional Education Series

Second Edition

Donna S. Queeney

Barbara E. Hanniford

Elizabeth A. Twitchell

May, 1981

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
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The Continuing Professional Education Development Project is being conducted at The Pennsylvania State University by Planning Studies in Continuing Education in association with the Center for the Study for Higher Education. Major goals of the project are

- To establish collaborative relationships between the University and the professions in order to strengthen the development and implementation of continuing professional education programs
- To develop and implement practice-oriented continuing professional education programs through the application of the Practice Audit Model to six selected professions
- To develop models of the University/profession collaborative relationship for continuing professional education which can lead to its insitutionalization

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This report represents both an updating and an expansion of the 1980 edition of Professional and Occupational Practice Requirements: A Continuing Professional Education Series. Undertaken as an ongoing project of Planning Studies in Continuing Education at The Pennsylvania State University, it is intended to serve as a working tool for continuing educators and others concerned with the preparation and continued learning of professional and occupational practitioners.

~~Karen P.~~ Manz, a former graduate assistant, contributed significantly to the 1980 report. Barbara E. Hanniford and Elizabeth A. Twitchell, staff specialist/writer and graduate assistant respectively, have assumed a major portion of the responsibility for this second edition.

Donna S. Queeney
Assistant to the Director/Editor
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May, 1981

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INTRODUCTION

Continuing professional education has recently attained prominence as educational institutions, professional associations, and others have sought to meet the growing learning needs of professional and occupational practitioners in a large number of fields. While continuing professional education is a widely acknowledged means of enabling professionals to keep up to date, as a concept it must be developed properly and applied with care. Continuing professional education does not lend itself to precipitous action or impromptu program development.

At The Pennsylvania State University career education has long been one of the three major parts of the Continuing Education program, the other components being personal development and community service. The goal of a carefully developed program, responsive to the needs of Pennsylvania practitioners, has guided the evolution of the University's work in continuing professional education.

Background

This report is a part of the ongoing study of continuing professional education at The Pennsylvania State University. The first publication to emerge from the study, "Continuing Education Requirements in the Professions and Trades," was written by Benjamin M. Nead of Planning Studies in 1974. This paper provided an overview of continuing education as a requirement for licensure to practice or for professional association membership, and included basic information regarding the following professional and occupational categories:

- Health Professions
    - Physicians and Surgeons
    - Nurses
    - Nursing Home Administrators
    - Podiatrists
    - Chiropractors
    - Osteopaths
    - Pharmacists
    - Optometrists
    - Physician Assistants
- Business Occupations
    - Accountants
- Other Occupations
    - Engineers
    - Psychologists
    - Lawyers

(Nead, 1974)

The twenty-six professions and occupations regulated in Pennsylvania through the Bureau of Professional and Occupational Affairs, Department of State, were identified in the paper, as were the 180 occupations certified or licensed by various localities within the Commonwealth.

In January, 1976, a Committee on Continuing Professional and Occupational Education was appointed by Floyd B. Fischer, vice president for Continuing Education. This group was asked to examine national trends, assess continuing professional and occupational education at The

Pennsylvania State University, and make recommendations. Their 1977 report responded to these charges and laid the groundwork for future directions.

In summarizing general trends in the University's program, the Committee stated:

> The dominant feature of the entire continuing education program is professional and occupational education. The overwhelming motivation that brings students to the credit and non-credit courses and services is a desire to improve professional or occupational status. The motivation comes from the individuals themselves, or, indirectly, from their employers, government regulation, or professional associations and societies to which they belong. In many cases their participation is required in a form of mandatory continuing education, a state of mind or condition which has evolved from educational practices in pre-service education and from the rapid pace of development of new knowledge and its application in an industrial society (Froke, 1977).

Because of this reality, the Committee recommended that the University retain professional and occupational education as its primary continuing education emphasis.

The Committee's report also identified four major trends, expected to have a major impact on the future of continuing higher education in the 1980s and 1990s.

1. Licensing and certification of persons who practice in the professions and occupations are expected to increase with emphasis on continuing education as a means of assuring competence.
2. Employee educational benefits, including direct payment of tuition as well as tuition reimbursements, have increased dramatically in recent years, partly at the initiative of the employer and partly in response to adoption of educational benefits as a major issue in union-management negotiations.

3. Institutions and agencies whose primary societal function is something other than education have become major purveyors of continuing education in the professions and occupations.

4. Part-time students, principally adults, are becoming less interested in the occasional credit courses and more interested in patterns of course enrollments that lead to long-term educational objectives, including degrees. As a consequence, educational planning based on demographic data and other resources is an increasingly important component of the total continuing higher education system (Froke, 1977).

As these trends were discussed in the report, recommendations were made regarding the University's role in responding to them. The development of a central collection of information about professional and occupational regulation, based upon Neal's earlier publication, was one of those recommendations.

It was in response to this suggestion that *Professional and Occupational Practice Requirements: A Continuing Professional Education Series* was begun by Donna S. Queeney and Karen P. Manz of Planning Studies in 1978. They completed two informal installments of the Series in June and December, 1979, supplying information on fifty-five professions and occupations. A more complete report, issued in February, 1980, utilized the material from those two installments in presenting a comprehensive picture of professional and occupational regulation in Pennsylvania and its implications for continuing higher education.

This report is the most current installment in the Series. It is both an expansion and an updating of the earlier work. All information on the professions and occupations addressed earlier has been revised as necessary to reflect changes in legislation, certification requirements, and other pertinent material. In addition, the number of professions and occupations addressed has been brought to seventy-five.

Also in response to recommendations of the Committee on Continuing Professional and Occupational Education, a five-year University-wide Continuing Professional Education Development Project was begun July 1, 1980. Funded jointly by the W. K. Kellogg Foundation and Penn State, the Project is bringing professional associations and higher education together to develop practice-oriented continuing professional education programs through a collaborative needs assessment/program development process.

Objectives of this Study

The study of which this report is a part has one primary objective:

> To provide a comprehensive, up-to-date compilation of data regarding professional and occupational practice requirements in Pennsylvania, focusing on the role of continuing professional education in the various credentialing processes. This material is intended to function as a useful resource to those serving Pennsylvania's practitioners through the provision of initial professional education, regulation, and continuing education.

The study also has four secondary objectives:

1. To develop and apply a methodology for working with educators, professional associations, regulatory agencies, and practitioners to obtain relevant data on professional and occupational regulation and the role of continuing education in its implementation.
2. To observe state and national trends, both within and across professions, regarding regulatory practices and attitudes toward and participation in continuing professional education.
3. To identify potential continuing education target groups.

4. To identify resource persons within the professions and occupations who might aid the Continuing Education staff of The Pennsylvania State University in defining areas for program development.

PROCEDURE

Inherent in the fulfillment of the primary objective of this study is an ongoing process; existing information must be periodically updated if it is to remain current, and professions and occupations must be added as their individual development qualifies them for inclusion or as they are identified in the general striving for comprehensiveness. Thus the procedure of the study is not one with a beginning, middle, and end, but rather takes the form of a continuous cycle.

Selection of Professions and Occupations

The selection of professions and occupations is an inclusive, rather than exclusive, process. Fields are selected for the study on the basis of several criteria, with the option of making further additions always remaining open; it is expected that other professions and occupations will yet be added to those included in this report. Indeed, it is a goal of the study to address as many professions and occupations as are relevant.

Professions and occupations selected for inclusion meet one or more of the following criteria:

1. Individuals must obtain legal permission to practice the profession or occupation in Pennsylvania.
2. Professional organization(s) or association(s) certify, or formally recognize attainment of a level of competence by an individual, in the profession or occupation.
3. There is a registry maintained for individuals considered qualified to practice the profession or occupation.
4. Higher education is generally necessary for practice of the profession or occupation.

5. The Pennsylvania State University has a preprofessional or professional program in the field of study indicated by the profession or occupation.

6. The Continuing Education program at The Pennsylvania State University has provided educational services for, or worked with, the profession or occupation.

7. The profession or occupation was recommended for inclusion by a faculty or staff member at The Pennsylvania State University.

Reference was made to the earlier report by Nead, and also to two summaries of legally regulated occupations within Pennsylvania (Angel, 1970; Pennsylvania Laws, Statutes, etc., 1968) in identifying those professions and occupations for which legal permission to practice is required in Pennsylvania. Discussions with the assistant or associate deans for Continuing Education in each of the colleges of The Pennsylvania State University also produced a number of suggested professions and occupations, which were reviewed in terms of the criteria stated above.

The allied health professions required special consideration. Since there are almost 600 recognized allied health professions, it obviously was not practical to consider including all, or even most, of them. Identification of those to be addressed in this portion of the study was accomplished in consultation with the Office of the Dean for Allied Health Programs at The Milton S. Hershey College of Medicine of The Pennsylvania State University. Numbers of practitioners within Pennsylvania and the amount of education required or preferred for each of the professions were factors considered in selecting the allied health professions.

Full summaries have been prepared for sixty-six professions and occupations, and briefer synopses on nine additional fields are included. Those professions and occupations selected for synopses meet the criteria stated above, but are reported here in an abbreviated form because they either are represented by only a small number of practitioners within Pennsylvania or, as an emerging field, they lack uniform credentials.

The professions and occupations included in the study to date are:

- *Actuarial Science
- Applied Computer Science
- Architecture
- *Athletic Coaching
- *Athletic Training
- Bank Management
- *Career Counseling
- Child Day Care
- Chiropractic
- Clergy
- College Student Personnel Services
- Criminal Justice
  - Corrections
  - Law Enforcement
  - Probation and Parole
- *Dental Assisting
- Dental Hygiene
- Dentistry
- Dietetics
- Education
  - Elementary and Secondary School Counseling
  - Instructional Media Specialists
  - Public School Teaching
  - School Administrators
  - School Psychologists
- Emergency Medical Technology
- Engineering
- *Financial Analysis
- Forestry
- Funeral Direction
- *Health Planning
- Health Services Administration
- Insurance
- Interior Design

*These fields are described in the Synopses beginning on Page 249.

Landscape Architecture
Law
Library Science
Marketing
*Marriage and Family Therapy
Medical Records
Medical Technology
Medicine
  Doctor of Osteopathic Medicine
  Medical Doctors
*Mental Health Counseling
*Municipal Clerks
Municipal Government Management
Nursing
  Certified Registered Nurse Anesthetists
  Certified Registered Nurse Practitioners
  Licensed Practical Nurses
  Nurse Midwives
  Registered Nurses
Nursing Home Administration
Occupational Therapy
Optometry
Personnel Management
Pharmacy
Physical Therapy
Physician Assistants
Podiatry
Psychology
Public Accounting
Radiologic Technology
Real Estate
Recreation and Parks
Rehabilitation Counseling
Respiratory Therapy
Sanitarians
Secretarial Practice
  Certified Professional Secretaries
  Legal Secretaries
  Medical Assistants
Security Sales
Social Work
Surveying
Transportation and Logistics
Travel Agents
Urban and Regional Planning
Veterinary Medicine

*These fields are described in the Synopses beginning on Page 249.

Methodology of the Ongoing Study

As each profession or occupation is selected for either a full summary or a synopsis, copies of laws governing its practice within Pennsylvania are obtained, and information from professional associations at both state and national levels is also gathered. Individuals from the following areas are identified and subsequently interviewed:

1. Education. Wherever possible, a Pennsylvania State University faculty member teaching and/or doing research in the field is contacted. In many cases faculty members are serving on state or national regulatory boards or as officers in state or national professional associations, and are particularly well-versed and helpful.
2. Regulatory Agencies. In all cases where legal regulation exists, the regulatory agency is contacted. In many cases the spokespersons for these groups provide substantial amounts of information and verification of data.
3. Professional Associations. State and/or national professional associations are contacted so that their perception of attitudes and trends can be obtained. Many of these groups include an education or continuing education director who serves as an excellent source of information.
4. Practitioners. Individuals engaged in day-to-day practice of an occupation or profession provide a different perspective than any of the above sources.

Because each profession or occupation is somewhat unique in its organization and operation, adoption of a standard procedure for collecting information and contacting individuals is simply not practical. However, the attempt is made to be as thorough as possible, and all suggested approaches are explored.

Potential resource persons are identified from among those contacted. The individuals selected as resource persons are active in the practice, teaching, regulation, or organization of their profession or occupation; willing and able to provide information for the study; and willing to serve as contacts for continuing educators investigating program development ideas.

Information gleaned from available material is outlined prior to interviewing each resource person. This is done to provide the interviewer(s) with background information and to allow the resource person to verify the interviewer's understanding of the information.

Upon completion of all interviews for a given profession or occupation, a summary is drafted and sent to each person interviewed for his or her review prior to being finalized.

The information included in this report is continuously being updated. As resource persons become aware of changes within their fields, these changes are made in the summary for that field, and an annual review of all professions and occupations addressed has been implemented. This process is greatly facilitated by the use of computerized information storage and retrieval systems.

Interview Format

A formal interview schedule has not been developed because the variety in organization and operation of professions and occupations noted earlier makes a rigidly defined format impractical. However, the following topics are covered in each interview as applicable.

I. Review of information regarding legal regulation in Pennsylvania
    A. Regulatory agency and law
    B. Requirements for entry into practice
        1. Education
        2. Experience

- 3. Examination
- 4. Other

- C. Requirements for continued practice
  - 1. General
  - 2. Continuing education
    - a. Existing
    - b. Proposed
- D. Trends and attitudes toward regulation
  - 1. State
  - 2. National
- E. Anticipated changes in regulation

II. Development and organization of the profession or occupation

- A. Historical perspective
- B. Education available
  - 1. Institutions
  - 2. Types of programs
- C. Supply and demand of practitioners
- D. Careers pursued by practitioners
- E. Trends within the field
  - 1. Education
  - 2. Diversification
  - 3. Attitudes
- F. Professional associations
  - 1. National, state, and local
  - 2. Benefits of membership
    - a. Educational opportunities
    - b. Lobbying
    - c. Other

III. Climate for continuing education

- A. Existing practices and providers
- B. Need for programs
- C. Trends for the future

IV. Other information

DISCUSSION

Widespread concern regarding the definition and maintenance of individual practitioners' competency has become an issue across the nation and across professions. This emphasis has led many states to institute or increase requirements for individuals to enter and remain in professional and occupational practice.

While the value of either voluntary or mandatory continuing education as a means of maintaining competency has been debated extensively (Forni, 1975; Kalman, 1976; Pottinger, 1977; Shimberg and Roederer, 1978; Talbott, 1979), to date continuing education has emerged as the most useful tool in competency maintenance. Many professional groups support mandatory continuing education, and those that do not require it usually encourage voluntary participation to prevent obsolescence. Thus continuing higher education has an important role to play.

The Growth of Practice Regulation

In the strictest sense, "practice regulation" denotes a form of legal, mandatory regulation. However, in a broader sense the term can be expanded to include voluntary regulation as well. This study addresses both mandatory and voluntary regulation, since both have implications for continuing professional education

In reviewing various forms of regulation, one finds the terms "certification," "licensure," and "registration" used frequently. For general usage they can be defined as:

Licensure

A process by which a government agency grants an individual legal permission to practice a specific profession.

Certification

A process by which a professional organization or association formally recognizes attainment of a level of professional competency by an individual.

Registration

A process by which a nongovernmental agency or organization identifies an individual by including his or her name in a roster of professional practitioners.

These terms are often used interchangeably, however, so that a given profession or occupation may apply its own definition to the term(s) it employs. In the discussion of each profession, the terms are utilized according to common usage in that profession.

Traditionally practice regulation was imposed only in those fields where it was deemed necessary to protect the health and welfare of the public. Once a license or certificate was issued it was considered to be good for the lifetime of the practitioner, fostering acceptance of the philosophy that a person entering a given field possessed lifelong competence in that area (Shimberg, 1977; Kalman, 1979). While this philosophy may have been considered reasonable in a time when the body of knowledge in any given field was small and slow-growing, most professions and occupations consider it quite impractical today. New knowledge is currently being generated at an unprecedented rate, raising very real, very serious, valid questions about the requirements both to enter and to remain in professional practice.

The knowledge explosion and the definition of more, and more specific, fields, have spawned a proliferation of professional regulations, primarily in response to the desire of practitioners, consumers, and state governments to protect the public from incompetent operators. The entire issue of the need for and justifiability of professional regulation has become a controversial one (Gross, 1978; Roederer, 1979; Zerlaut, 1975). How a person gets into a field and stays there has become an area of conflict within individual professions and between practitioners and the public (Frandson, 1975). The question of who should have how much control has been asked repeatedly (Jacobs, 1979).

An early approach to controlling for at least a minimal level of competence was accreditation of professional and occupational schools. Later, licensing of individual practitioners was adopted to effect further control in a number of fields. In fields where licensure was not adopted, or as a supplement to legal regulation, many professional associations instituted voluntary certification of their members to formally recognize attainment of a level of competence. Most recently, a number of professions and occupations have added continuing education as a relicensure or recertification requirement (Watkins, 1979), and a number of professional associations have also instituted a continuing education requirement as a condition for membership.

The use of continuing education as a means of updating professionals, enabling them to maintain an acceptable level of competence and avoid obsolescence, is still in the developmental stage. It is extremely difficult to establish evidence of a relationship between an individual's participation in continuing education and his or her increased knowledge, to say nothing of competence (Kalman, 1976;

Shimberg and Roederer, 1978). One study that attempted to get at this issue studied the relationship between "measurable job performance" of engineers and their continuing education participation, finding a positive relationship between the two factors (Morris, 1978). Eight continuing medical education studies also reported significant changes in clinical behavior as a result of well organized learning programs (Illinois Council on Continuing Medical Education, 1980). However, a great deal more work is needed to answer the myriad questions regarding the relationship between continuing education and competent practice.

Despite these reservations, a number of professional associations, individual practitioners, licensing bodies, and educators strongly believe that appropriate continuing education offers an individual the best opportunity to keep abreast of current knowledge in a given field. It is perhaps this development that has recently produced the greatest impact on higher education and its relationship to professional practice requirements.

A Summary of Professional and Occupational Regulations in Pennsylvania

Within the Commonwealth of Pennsylvania, as across the nation, professional regulation is increasing gradually. Groups that have previously had no regulation are initiating requirements for entry into practice. Those professions and occupations already featuring regulation for initial practice are adding requirements for continued practice. A continuing education requirement is frequently the next component added. And, either in addition or as an alternative to legal regulation, many groups are instituting or expanding forms of voluntary credentialing.

The following chart summarizes professional and occupational regulation in Pennsylvania for the seventy-five professions addressed. It is divided into two sections, one dealing with mandatory requirements for practice and the other with voluntary certification, designation, or membership.

Table 1

PROFESSIONAL AND OCCUPATIONAL REGULATION IN PENNSYLVANIA

Profession or Occupation	Mandatory Requirements for Practice			Voluntary Certification, Designation, or Membership		
	Initial Credentialing	Recredentialing	Continuing Education Requirement	Initial Credentialing	Recredentialing	Continuing Education Requirement
*Actuarial Science				X		
Applied Computer Science				X		
Architecture	X	X				
*Athletic Coaching						
Athletic Training				X	X	X
Bank Management						
*Career Counseling				X	X	X
Child Day Care Personnel	X					
Chiropractic	X	X				
Clergy						

* These fields are described in the Synopses beginning on page 249.

Table 1 (cont'd)

PROFESSIONAL AND OCCUPATIONAL REGULATION IN PENNSYLVANIA

Profession or Occupation	Mandatory Requirements for Practice			Voluntary Certification, Designation, or Membership		
	Initial Credentialing	Recredentialing	Continuing Education Requirement	Initial Credentialing	Recredentialing	Continuing Education Requirement
College Student Personnel Services						
Criminal Justice: Corrections	X					
Criminal Justice: Law Enforcement	X					
Criminal Justice: Probation and Parole						
*Dental Assisting				X	X	X
Dental Hygiene	X	X	X***			
Dentistry	X	X		X**		
Dietetics				X	X	X
Education: Elementary and Secondary School Counseling	X	X				

* These fields are described in the Synopses beginning on page 249.

** Indicates specialty certification.

*** Continuing education required for relicensure only if the applicant has not been engaged in active practice for ten or more years.

Table 1 (cont'd)

PROFESSIONAL AND OCCUPATIONAL REGULATION IN PENNSYLVANIA

Profession or Occupation	Mandatory Requirements for Practice			Voluntary Certification, Designation, or Membership		
	Initial Credentialing	Recredentialing	Continuing Education Requirement	Initial Credentialing	Recredentialing	Continuing Education Requirement
Education: Instructional Media Specialists	X	X				
Education: Public School Teaching	X	X				
Education: School Administrators	X	X				
Education: School Psychologists	X	X				
Emergency Medical Technology				X	X	X
Engineering	X	X				
*Financial Analysis				X	X	
Forestry						
Funeral Direction	X	X				
*Health Planning						

* These fields are described in the Synopses beginning on page 249.

Table 1 (cont'd)

PROFESSIONAL AND OCCUPATIONAL REGULATION IN PENNSYLVANIA

Profession or Occupation	Mandatory Requirements for Practice			Voluntary Certification, Designation, or Membership		
	Initial Credentialing	Recredentialing	Continuing Education Requirement	Initial Credentialing	Recredentialing	Continuing Education Requirement
Health Services Administration				X	X	X
Insurance: Agents and Brokers	X	X				
Interior Design				X	X	
Landscape Architecture	X	X				
Law	X	X				
Library Science	X					
Marketing				X	X	
*Marriage and Family Therapy				X		
Medical Records				X	X	X
Medical Technology				X	X	

* These fields are described in the Synopses beginning on page 249.

Table 1 (cont'd)

PROFESSIONAL AND OCCUPATIONAL REGULATION IN PENNSYLVANIA

Profession or Occupation	Mandatory Requirements for Practice			Voluntary Certification, Designation, or Membership		
	Initial Credentialing	Recredentialing	Continuing Education Requirement	Initial Credentialing	Recredentialing	Continuing Education Requirement
Medicine: Doctor of Osteopathic Medicine	X	X	X	X**	X	X
Medicine: Medical Doctors	X	X	X	X**	X	X
*Mental Health Counseling				X	X	X
*Municipal Clerks				X		
Municipal Government Management						
Nursing: Certified Registered Nurse Anesthetists	X	X	X			
Nursing: Certified Registered Nurse Practitioners	X	X				
Nursing: Licensed Practical Nurses	X	X				
Nursing: Nurse Midwives	X	X				

* These fields are described in the Synopses beginning on page 249.

** Indicates specialty certification.

Table 1 (cont'd)

PROFESSIONAL AND OCCUPATIONAL REGULATION IN PENNSYLVANIA

Profession or Occupation	Mandatory Requirements for Practice			Voluntary Certification, Designation, or Membership		
	Initial Credentialing	Recredentialing	Continuing Education Requirement	Initial Credentialing	Recredentialing	Continuing Education Requirement
Nursing: Registered Nurses	X	X				
Nursing Home Administration	X****	X	X			
Occupational Therapy				X	X	
Optometry	X	X	X			
Personnel Management				X	X	
Pharmacy	X	X				
Physical Therapy	X	X				
Physician Assistants	X	X	X			
Podiatry	X	X	X			
Psychology	X	X				
Public Accounting	X	X	X	X		

**** In some cases, continuing education is specifically required for initial credentialing.

Table 1 (cont'd)

PROFESSIONAL AND OCCUPATIONAL REGULATION IN PENNSYLVANIA

Profession or Occupation	Mandatory Requirements for Practice			Voluntary Certification, Designation, or Membership		
	Initial Credentialing	Recredentialing	Continuing Education Requirement	Initial Credentialing	Recredentialing	Continuing Education Requirement
Radiologic Technology				X	X	
Real Estate: Salesmen and Brokers	X	X				
Recreation and Parks Personnel				X		
Rehabilitation Counseling				X	X	X
Respiratory Therapy				X	X	
Sanitarians				X	X	
Secretarial Practice: Certified Professional Secretaries				X		
Secretarial Practice: Legal Secretaries				X		
Secretarial Practice: Medical Assistants				X	X	
Security Sales	X	X		X	X	
Social Work				X		
Surveying	X	X				

Table 1 (cont'd)

PROFESSIONAL AND OCCUPATIONAL REGULATION IN PENNSYLVANIA

Profession or Occupation	Mandatory Requirements for Practice			Voluntary Certification, Designation, or Membership		
	Initial Credentialing	Recredentialing	Continuing Education Requirement	Initial Credentialing	Recredentialing	Continuing Education Requirement
Transportation and Logistics				X		
Travel Agents				X	X	
Urban and Regional Planning				X	X	
Veterinary Medicine	X	X	X			

The information collected shows that there is a large and growing number of professions and occupations indicating needs for continuing professional education. While higher education can go a long way toward meeting continuing professional education needs, optimum continuing professional education can be achieved only through a cooperative effort that includes professional associations, licensing boards, practitioners, educators, and other institutions of higher education. Today's colleges and universities unquestionably have the educational capabilities and subject matter expertise, and it is in these institutions that new knowledge most frequently comes to light. However, the college or university alone cannot identify the problems and the educational needs of practitioners in a given field.

Several types of continuing education target audiences can be identified from the study, and include professions and occupations for which:

1. Continuing education is required to maintain credentialing mandatory for continued practice, as indicated in Table 1.
2. Continuing education is required to maintain voluntary credentialing, as indicated in Table 1.
3. Continuing education is required for initial mandatory credentialing. As shown in Table 1, this condition exists in only one field at this time.
4. Continuing education participation is voluntary but regarded as advantageous. The majority of professions and occupations reviewed to date are in this category.
5. Continuing education courses may be used to meet some or all of the educational requirements for initial mandatory credentialing. For example, the educational requirement for licensing as a real estate agent may be met through successful completion of continuing education courses, although continuing education is not specifically required.
6. Continuing education courses may be used to meet some or all

of the educational requirements for initial voluntary credentialing. Emergency medical technology is an example of a field in which the required education is often obtained through participation in continuing education.

7. The educational institution cannot provide continuing professional education, but can offer programs in related areas or for personal development or community service.

Implications for Continuing Higher Education

The role of universities in professional education was well defined by Wilhelm von Humboldt when he established The University of Berlin in 1810. He envisioned the core of the university as the scholarly scientific and philosophical disciplines, surrounded by professional schools reaching out to the world of practice. Professional preparation included the student's passage through the university core of basic disciplines and into the professional school of specialization. This pattern has been adopted within the last century in this country as a model for preparing physicians, lawyers, and countless other professional and occupational practitioners.

Von Humboldt also expected the professions to feed back into the university the problems they encountered in the course of practice. The university-based disciplines then would address these issues through research and teaching, and transmit the results to practitioners. To date this segment of von Humboldt's plan has not materialized to the extent that it might have in this country. In light of the current emphasis on continuing professional education, however, the challenge to make it work is very real.

Virtually every profession and occupation investigated in this study has indicated support of some form of continuing education for its practitioners. Whether voluntary or mandatory, continuing education is viewed as a useful means of accomplishing a number of professional goals, as expressed by the trends observable in the professions and occupations studied.

Most policies governing professional and occupational practice are developed at the state level, but they often have their bases in national concepts. Thus, while educational institutions need to address the regulations within the state(s) they are serving (Knox, 1979), they should also realize that many of the policies transcend state borders. Professional "philosophies" frequently come down from the national level and are translated into regulations, attitudes, and trends that prevail in a number of states or even throughout the country.

While continuing education for some time has been considered a valuable means of obtaining current information in a given field, this study indicates that professional and occupational practitioners also participate in continuing education for a number of other reasons. A number of professions are encouraging the use of continuing education for the purposes described below.

To Maintain Competency. While opponents of mandatory continuing education argue that continuing education participation is no guarantee of competence, few if any will deny that continuing education provides an opportunity for an individual to gain new knowledge that can be applied to make him or her a more competent practitioner. In some fields, practitioners feel the need for continuing education quite strongly and hence are motivated to participate voluntarily. Professional engineers, for example, cannot maintain a viable practice if their skills become obsolete, and are thus motivated to learn. Continuing higher education needs to find out what new knowledge and skills these professionals need, and to provide the appropriate educational programs. In other fields, mandatory continuing education may be considered desirable to ensure practitioners' participation. Requiring that a practitioner continue learning is intended not only to protect the public, but also to protect the practitioner. For example, in Pennsylvania the insurance field experiences a high turnover of agents, which may be attributed in part to agents' failure to keep up with a constantly changing industry.

To Prepare for Credentialing Examinations. Before maintaining competence becomes an issue, applicants to practice in many fields are required to pass an examination for initial licensure or certification. Continuing education courses are frequently of value in preparing individuals to take these examinations. Such courses can not only review information that has been learned earlier, but can also focus on specific areas covered by the examination or provide practice in taking an examination. For instance, architects have suggested that a course offering practice sessions or a "dry run" for the design portion of their licensing examination would be extremely useful. The high failure rate on this portion of the test is attributed largely to individuals' inability to pace themselves properly in the time allowed.

In some professions, an experience requirement must be met before an individual can sit for the licensing examination. In other professions, an individual must be licensed only if he or she has an independent practice, so someone working in industry, government, or as an educator in the field is exempt from this regulation. However, if this individual should decide to work as a consultant or to set up his or her own business, licensure would be required. In cases such as these, where the licensure examination is taken after a few years of practice rather than directly upon completion of education or training, a good old fashioned review has real merit.

To Qualify for Initial Licensure or Certification. In some cases continuing education participation, perhaps in combination with other factors, may enable an individual to qualify for initial licensure, certification, or registration. Continuing education may be specifically required, or it may be used as a means of meeting more general education requirements. Persons wishing to enter the real estate field, for example, often meet the education requirement by successfully completing courses offered through continuing education. An individual having a degree in a field other than that which he or she wishes to enter may take continuing education courses to supplement the degree and meet specific content requirements for practice.

To Update Those Practicing Prior to Regulatory Legislation. In some cases continuing education might be desirable for individuals already practicing. As states have passed legislation and implemented and revised regulations regarding who may practice in a given field, large numbers of individuals have been covered by a "grandfather" clause. These people, practicing at the time of legislation, are granted licensure or certification without meeting the newly established requirements. Some of them have had very little or no formal education in their field, as has been the case in some states with licensed practical nurses. Such practitioners may find continuing education courses especially beneficial for learning some of the underlying theory and basic concepts central to their fields.

To Provide Education in New Practice Areas. Another consequence of knowledge growth and society's changing needs is the emergence of new practice areas within, or as outgrowths of, existing fields. The law enforcement field, where private security is a growing area, is an example. In this case, the demand for private security personnel is quite significant and is increasing rapidly, but because of the newness of the field there are few persons educated in it. Interested individuals in the law enforcement field could supplement their existing training in the direction of private security through continuing education courses.

This concept also has relevance for retraining. As some fields become overcrowded, individuals may elect or be forced to seek employment in other, related fields. This type of adaptation might best be accomplished through continuing education.

To Enhance Job Security and Advancement. A related application of continuing professional education receiving increasing attention is its use to enhance job security and improve opportunities for advancement. A formal degree is required for practice in a majority of professions, and there is a growing trend toward requiring a degree for employment where this has not previously been the case. This tendency may be viewed as a response to the expansion of knowledge in many fields and the resultant need for more educated practitioners.

In the nursing field, an individual can become a registered nurse through a diploma program or an associate or baccalaureate degree program. There has been a significant amount of discussion regarding the requirement of a baccalaureate education of all new R.N.s in the future. If this materializes, it is not unrealistic to expect that at least some less experienced diploma and associate degree nurses may view it as a threat to their job security and their opportunities for advancement. A similar situation exists in the criminal justice field. There the minimum educational requirements for police officers generally include a high school education and completion of a training program, but a baccalaureate degree is seen as a desirable criterion for promotion.

Education beyond that necessary to enter or remain in practice is required to attain certain professional levels or designations in some fields. For example, continuing education may be used to help a real estate agent move up to broker, or to qualify an insurance agent to pursue the Certified Life Underwriter designation.

To Supply Information in Related Areas. Another type of information frequently sought and logically offered through continuing education is that dealing with areas related to professional practice but not addressing the specific subject area. This category includes such things as office management for physicians, interpersonal skills for insurance agents, and teaching skills for librarians. Practitioners report that they often need these types of information, but do not get them in the normal course of their education.

To Serve as a Forum for Professional Exchange. Just as practitioners can learn from continuing education courses, they can also learn from each other. In some professions, such as social work and interior design, continuing education programs can provide a forum for the exchange of ideas. By offering a loosely structured workshop keyed to timely topic and problem areas, continuing education can serve as a catalyst, bringing practitioners, educators, and others if desired, together to discuss various aspects of an issue or ways of handling a problem.

To Provide Updated General Education. As new insights and knowledge develop in the practical areas of the professions and occupations, so do they evolve in the social sciences, arts, humanities, biological sciences, and physical sciences. Since all professions and occupations are set in this broader context of general education, the need for practitioners to keep abreast of growth in these basic areas is substantial. Continuing education programs within the areas of general education can be fundamental in enabling practitioners to retain a realistic perspective of their field within a changing society.

More and more practitioners in an ever increasing number of professions are requiring, requesting, needing, and wanting supplemental education. Thus, continuing higher education has an opportunity to provide a very real service to large segments of the population. There are opportunities for continuing professional educators to seriously evaluate continuing professional education needs, and to work cooperatively with professional associations, licensing boards, practitioners, and other institutions of higher education in providing the most effective continuing professional education.

SUMMARIES

The following summaries of sixty-six professions and occupations present information for use by those involved in continuing professional education program development. In addition to outlining the requirements for individuals wishing to obtain mandatory or voluntary credentials, the summaries provide background information on the development of the profession or occupation and material on current trends within the field. A section on the climate for continuing education has been included in each summary to give continuing educators an overview of the group's perceived need for and interest in continuing education programs.

The primary function of the summaries is to assist the continuing educator in identifying those professions and occupations warranting further exploration as continuing professional education target groups. The material included will continue to be expanded and updated.

APPLIED COMPUTER SCIENCE

There is no mandatory certification or licensure of computer professionals in Pennsylvania. However, voluntary national certification for computer programmers and data processing professionals is provided through the Institute for Certification for Computer Professionals (ICCP).

CERTIFICATION INFORMATION

In order to receive a Certificate in Computer Programming (CCP), an individual must:

I. Successfully complete a CCP examination covering a common core of programming knowledge and one area of specialization.

II. Pay an examination fee.

III. Subscribe to the ICCP Codes of Ethics, Conduct, and Good Practice.

In order to receive a Certificate in Data Processing (CDP), an individual must:

I. Have at least sixty months of full time experience in computer-based information systems. Academic work may substitute for a portion of the experience requirement.

II. Successfully complete all five sections of the CDP examination which covers data processing equipment, computer programming and software, principles of management, quantitative methods, and systems analysis and design. All sections must be passed within four consecutive testing sessions.

III. Subscribe to the ICCP Codes of Ethics, Conduct, and Good Practice.

IV. Pay application, general testing, and specific test section fees.

RECERTIFICATION INFORMATION

There are no provisions for recertification.

Continuing education requirements: none.

BACKGROUND INFORMATION

Computer professionals work in a variety of settings and may have different levels of responsibility and job titles. Rapid changes in technology have led to corresponding changes in occupational titles, and persons performing similar functions may have different titles in various settings. This report will deal exclusively with persons working in applied settings, such as business, science, or engineering. However, computer professionals may also hold administrative, library, or academic positions, design and produce hardware, or work in the areas of computer operations or systems support. Thus, the field is broad and allows advancement through a number of different career paths.

Within the applications function, the positions of systems analyst, programmer-analyst, and computer programmer are most common, but distinctive intermediate jobs such as systems designer and program designer are emerging.

A systems analyst meets with clients or users of the information to determine if a computer system is a cost effective tool for solving a particular problem. The analyst is also responsible for conducting a formal user survey, and must be aware of the budgeting and management information needed for effective decision-making. Although analysts need not know precisely how the user's request will translate into specific computer programs, they must have sufficient familiarity with computer systems to know technological trends.

A programmer-analyst communicates between the systems analyst and the programmer. The programmer-analyst attempts to develop systems specifications that anticipate future problems. Persons in this position might communicate with clients, but must also have specific information about computer hardware systems and general concepts regarding program design.

Computer programmers transform the systems and program specifications into detailed program design and actual coded programs. They must have considerable knowledge of specific programming languages and some knowledge of computer architecture. In this position, they respond to instructions from higher level computer personnel and are not generally responsible for overall system design.

There are a variety of ways to advance within the computer field, but most persons will have had at least some programming experience. A few basic programming courses are sufficient to obtain a job as a programmer, particularly if there will be close supervision and support as the programmer gains experience. Coursework may be taken through vocational-technical schools, junior or community colleges, associate degree programs, or four-year educational institutions. Advancement into higher levels of responsibility occurs primarily as a result of broader education plus experience and further training. Most persons in design or analyst positions hold college degrees. In addition to technical training, qualities such as logical thinking, time management, and planning ability are important. Persons working in non-business applications usually need additional scientific or engineering background. As computer personnel advance into positions which involve more client contact, communications skills become increasingly necessary. High standards of ethical conduct are crucial at all levels, since computer systems often maintain very sensitive and valuable information.

Penn State offers an associate degree in computer programming at several Commonwealth Campuses. Tentative plans are being developed to initiate a Computer Information Systems program at University Park which would have a strong applied orientation. Such a curriculum might include an introductory computer course, basic computer languages, writing of structured programming, compiler information, and information about large data bases and systems. Students probably also would take a software project lab course which would add an experience component.

Professionals in the field view CCP or CDP certification as quite unnecessary in terms of obtaining employment, because there is a great demand currently for persons with technical skills. Also, some practitioners feel that the examinations are too broad to reflect specializations within the computer field. However, certification is viewed by many as a desirable designation, and there are 22,500 CCPs and CDPs nationwide.

A variety of professional associations serve the needs of computer personnel. The American Federation of Information Processing Societies includes twelve constituent societies engaged in the design and/or application of computers and information processing systems. Its constituent organizations which relate most directly to the professions described in this report are American Society for Information Science (ASIS), Association for Computing Machinery (ACM), Association for Educational Data Systems (AEDS), Data Processing Management Association (DPMA), and The Institute of Electrical and Electronics Engineers Computer Society, Society for Industrial and Applied Mathematics (SIAM), and the Society for Information Display (SID). An unrelated group, Association for Systems Management (ASM), is organized specifically for systems analysis professionals. These associations operate through local and/or regional chapters rather than state affiliates.

In addition to these organizations, there are user groups which are, in some cases, vendor-sponsored. For example, SHARE and GUIDE are two IBM user groups which meet periodically to discuss common concerns and interests and provide feedback to IBM. College and University Systems Exchange (CAUSE) is not vendor-oriented, and has a focus on applications within higher education settings. The Yourdon User Group (YUG) is composed of persons who utilize Yourdon's systems design methodology.

CONTINUING EDUCATION CLIMATE

The technology explosion perhaps has its greatest effect on persons working in the computer field and has resulted in a real need for professionals to remain current. The extent to which one must understand the technical details of particular computer systems varies with one's job responsibilities. Computer programmers need more updating on detailed knowledge than do systems analysts. The latter would be more likely to need professional development in communications skills and information on systems design.

A variety of providers meet the continuing education needs of computer professionals. Professional associations offer journals and other publications, and the associations and user groups also sponsor seminars, workshops, and annual meetings. Chapter meetings usually include educational components. Hardware and software vendors provide courses that probably are most valuable to programmers, since they cover specific computer usages and techniques. Computer consulting firms and educational institutions are other providers of professional development.

Much of the educational programming currently offered appeals to either entry level programmers or higher level managers or analysts. Programs aimed at mid-level personnel are often provided by consulting firms, and tend to be very expensive. Workshops or courses on state-of-the-art methodology, testing, and design might be useful. Some computer professionals feel that persons at this level are the best target group for continuing education offerings. Systems analysts might benefit from courses in effective writing skills and interviewing techniques.

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ARCHITECTURE

Pennsylvania Architects' Law regulates the practice of architecture in the Commonwealth and provides for the establishment of the State Board of Examiners of Architects to work in conjunction with the Commissioner of Professional and Occupational Affairs for the licensing and regulation of architects.

LICENSING INFORMATION

A person may become a registered architect by written examination, reciprocity, or appearance before the Board.

To become registered by written examination, an individual must:

I. Reside in Pennsylvania or be employed in Pennsylvania by registered architects who maintain a practice of architecture under a permanent Pennsylvania address.

II. Meet ONE of the following sets of eligibility requirements:

  A. Option 1

    1. Hold an undergraduate professional degree in architecture from an accredited school of architecture, and

    2. Have three years of experience in the office(s) of registered architects or the equivalent of said experience. In all cases an individual must have a minimum of twelve months of experience after graduation under the supervision of a registered architect.

  B. Option 2

    1. Hold a master's, Ph.D., or other doctoral degree in architecture from an accredited school of architecture, where said degree is the first professional degree, and

    2. Have three years of experience in the office(s) of registered architects or the equivalent of said experience. In all cases, an individual must have a minimum of twelve months of experience after graduation under the supervision of a registered architect.

  C. Option 3

    1. Hold a first professional accredited degree and hold a master's, Ph.D., or other doctoral degree in architecture. where said degree is the second or advanced professional degree, or have a minimum of twelve months of experience teaching in an accredited school of architecture, and

    2. Have two years of experience in the office(s)

of registered architects or the equivalent of said experience.

D. Option 4

1. Hold a high school diploma, and

2. Have a total of thirteen years of experience, including ten years of experience in the office(s) of registered architects or the equivalent of said experience, prior to being admitted to the qualifying examination, and three years of experience before or after taking the qualifying examination.

3. Pass the Qualifying Examination.

E. Option 5

1. Hold a non-architectural degree or have earned some college credit, and

2. Have earned experience in the office(s) of registered architects or the equivalent of said experience, where said experience will total the five years of educational equivalents needed by accredited school candidates. The duration of experience will vary with educational background.

3. Pass the Qualifying Examination.

4. Have an additional three years of experience in the office(s) of registered architects, or the equivalent of said experience.

III. Pay an application fee for EACH examination (Qualifying, Design, Professional) EACH time that it is taken.

IV. Pass the Design Examination, which is Part A of the Professional Examination.

V. Pass Part B (the remainder) of the Professional Examination.

All foreign degrees are considered non-accredited with the exception of a British Commonwealth degree, which is acceptable by reciprocal agreement.

Registration by reciprocity may be granted to an applicant who holds a National Council of Architectural Registration Board (NCARB) certificate and/or is an architect in another state, territory, or country where, in the judgment of the Board, the qualifications required for registration are equal to those in Pennsylvania, and provided the applicant is not under investigation as a result of an alleged violation of law, or having been found guilty of a violation, has satisfied the penalty imposed. Payment of registration fee is required.

Registration may be granted at the discretion of the Board to an experienced architect, who appears before the Board to respond to questions and present examples of his/her work. Payment of a registration fee is required.

RELICENSING INFORMATION

To maintain licensing an individual must pay a biennial renewal fee. An architect who permits his/her registration to lapse must pay a reinstatement fee, the renewal fee, and a penalty fee for each lapsed month since the reinstatement date. The registration periods extend from July 1 of each year to June 30 two years hence.

Continuing education requirements: none.

BACKGROUND INFORMATION

The Board of Examiners of Architects in Pennsylvania maintains membership in NCARB, as do all other state boards. NCARB has no authority or power over the state boards, but generally they receive cooperation and compliance from these boards. The states generally abide by the NCARB rules, and this uniform regulation serves as an aid in developing reciprocity among the states.

The Pennsylvania Board, which presently consists of seven members, is currently proposing revision of the law, rules, and regulations dealing with the licensing and regulation of architects (Title 49, Pa. Code Ch. 9). Changes being suggested include a redefinition of "architecture," allowance for practice as a business corporation (rather than only as a professional corporation), and increases in the penalties and fines for violations of the law.

The three examinations given by the Board—Qualifying, Professional Part A (Design), and Professional Part B—are all national examinations. Those applicants required to take the Qualifying Examination must pass it before taking the Professional Examination. In Pennsylvania the Design Examination may be taken after eighteen months or more of acceptable training following receipt of an architectural degree. The examinations are given in the Philadelphia and Pittsburgh areas. The Qualifying and Professional A (Design) Examinations are offered in June, and the Professional Examination B may be taken in December. Parts A and B of the Professional Examination may be taken in any order.

The failure rate on the Design Examination is quite high. Board members attribute this failure rate at least in part to an inability of the applicants to pace their work properly through the twelve-hour examination period. It has been suggested that a preparatory course or "dry run" for the Design Examination could be useful in helping applicants overcome this timing problem.

Evaluation of the experience, or work time, of applicants is made by the Board in accordance with the NCARB Table of Equivalents. At least twelve months of the experience must be directly under the supervision of a registered architect after graduation. If a person works for a registered architect during summers while going to school, up to twelve months' credit may be granted for this experience. Credit for work with an engineer, contractor, or other person in the design and/or building professions may also be granted at the discretion of the Board at the rate of 50 percent (e.g., one year of credit for two years of work) and for a maximum of two years, but this experience must be combined with twelve months under a registered architect to meet the total experience requirement. New legislation enabling architects to also serve as contractors, and hence function as "designer-builders," will make the demarcation of work time definitions more complex.

A national internship development program (IDP) has been developed in nine states (excluding Pennsylvania), and there are attempts to introduce it in all states. The IDP insures that a person gains experience in all facets of architecture during his/her work time.

There are approximately 6,000 registered architects in Pennsylvania, about 3,000 of whom are currently residents of the state. The remainder hold licenses but may reside and/or practice outside of Pennsylvania. Penn State graduates an average of thirty-five to forty students in its undergraduate program each year and about twenty students in its professional degree program. The graduate professional program in architecture at Penn State is limited, and enrollment will be confined to graduates of four-year pre-professional programs outside of Penn State. A second M.S. and advanced degree is also available at Penn State.

The Pennsylvania Society of Architects (PSA), the state association of the American Institute of Architects (AIA), has approximately 1,500 members in six chapters: Philadelphia, Northeastern (Scranton-Wilkes-Barre), Central, Western (Pittsburgh), Northwestern (Erie), and Bucks County. Each chapter holds monthly meetings for lectures, business, and legislation review. The state Society meets yearly for a three-day forum. These forums, held in a different part of the state each year, include educational programs and exhibits by the building industry. PSA has an executive director and an office in Harrisburg, and AIA members are represented by a regional director at AIA in Washington.

CLIMATE FOR CONTINUING EDUCATION

Some type of "live" preparatory course for the Design Examination, and perhaps for the qualifying and Professional Examination, has been recommended. Study guides are available by mail to help applicants prepare, but especially in the case of design this type of instruction appears to fall short of its goal. In other states and in large urban centers there are courses specifically developed to help applicants prepare for the Design Examination, and apparently they are beneficial.

The need for continuing education for architects already registered has been acknowledged by both PSA and AIA. While practitioners are opposed to mandatory continuing education, PSA and AIA feel that if architects do not establish patterns of participation in continuing education of their own volition, they may be forced by outside agencies to adopt continuing education requirements. AIA organizes a significant number of continuing education programs, and also encourages the state societies to develop programs.

The Department of Architecture at Penn State recently assumed responsibility for the organization of continuing education programs for architects in Pennsylvania for PSA. While other institutions are of course free to develop programs also, Penn State and PSA are willing to work closely to identify topics and develop and implement seminars, workshops, or courses to meet architects' continuing education needs.

The topics for continuing education programs have been selected because of the shortcomings detected by the professional society, practitioners, and schools in a particular area. Recent topics have included site planning, application of free energy to the design of buildings, energy analysis and retrofitting, and financing of buildings. At three-day sessions in continuing education held in October, 1978, in Hershey, session attendance ranged from fifteen to thirty participants.

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ATHLETIC TRAINING

There is no mandatory licensure or certification of athletic trainers in Pennsylvania. However, voluntary certified membership in the National Athletic Trainers Association (N.A.T.A.) is available to individuals seeking this recognition. The information included in this report focuses primarily on secondary school athletic trainers, but it is also relevant to athletic trainers working in higher education or professional settings.

CERTIFICATION INFORMATION

To become a certified member of N.A.T.A. an individual must:

I. Be a member of N.A.T.A.

II. Maintain current certification in standard First Aid and cardio-pulmonary resuscitation (CPR).

III. Present a Competency Evaluation Checklist from a certified athletic trainer.

IV. Meet ONE of the following options:

A. Complete N.A.T.A. approved athletic training curriculum requirements, hold a bachelor's degree from an accredited college or university, and spend at least 800 hours during a specified time period under the direct supervision of N.A.T.A. approved clinical instructors. Penn State offers such an athletic training program through undergraduate resident instruction, or

B. Have at least 1800 hours of on the job training during a specified time period under the supervision of a certified N.A.T.A. member, hold a bachelor's degree from an accredited college or university, and present letters of recommendation by a certified athletic trainer and the individual's acting team physician, or

C. Have five years of acceptable athletic training experience after college graduation and present letters of recommendation from a certified athletic trainer and and the individual's acting team physician, or

D. Spend at least 600 hours during a specified time period under the direct supervision of an actively engaged certified athletic trainer beyond that as a student trainer at the secondary level, hold a bachelor's degree from an accredited college or university, and present letters of recommendation from a certified athletic trainer and the individual's acting team physician. This option applies to physical therapy degree graduates.

V. Pass a national examination, which takes four hours to complete and includes both written and a skills performance tests. The examination is given four times a year at either West Chester State College or Penn State University. There is an examination fee, and the examination may be retaken twice.

RECERTIFICATION INFORMATION

After an individual is certified through N.A.T.A., the certification is valid for three years.

Continuing education requirements: Six CEUs must be completed every three years. This requirement currently applies only to the certified members, but may be expanded to include associate members.

BACKGROUND INFORMATION

In many professions and occupations where the public health, safety, and welfare is affected, regulation exists in some form for the public's protection. However, in the area of athletic training at the high school level, individuals with varied backgrounds serve as athletic trainers without prior training or education in the field.

There does not appear to be a trend towards mandatory regulation of athletic trainers in the near future, although some foresee eventual certification requirements through the State Department of Education.

Currently, the primary voluntary certification of athletic trainers is provided through N.A.T.A., an organization of athletic trainers in high schools, preparatory schools, military schools, colleges, universities and professional football, baseball, basketball, and ice hockey teams. However, voluntary state credentialing through the State Physical Therapy Board is likely to be adopted in the near future.

CLIMATE FOR CONTINUING EDUCATION

The demand for athletic trainers is greater than the supply. Several studies have shown that the general knowledge of non-certified athletic trainers is limited and a deficiency in knowledge of current developments in the field exists on a large scale. Although most athletic administrators recognize the need for the position of athletic trainer on their staffs, many of the individuals are hired to fill these job openings without concern for their qualifications or knowledge of the field.

Continuing education programs are available for athletic trainers both through the colleges and universities offering athletic training programs and N.A.T.A. N.A.T.A. offers continuing education for athletic trainers at workshops preceeding the national conference as well as during the conference. In addition, each district of N.A.T.A. produces an education program each year where CEU credit may be granted. Two professional preparation conferences are given each year for three days and CEUs are granted for attendance.

Small colleges may also benefit from staff participation in the continuing education programs, as their athletic staffs may not be as extensive as those at some of the larger schools.

The athletic training programs may be viewed as continuing education for individuals who wish to be athletic trainers on a full or part time basis. Individuals who complete an approved athletic training program at a college or university may be employed by a school district as a teacher/trainer.

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BANK MANAGEMENT

There is no mandatory certification or licensure of bank officers or managers in Pennsylvania.

BACKGROUND INFORMATION

Bank managers and officers hold a variety of management responsibilities within banks. Senior officers oversee general bank operations, and middle or lower level managers may work in such areas as loans, trust departments, and branch management. The distinction between management and non-management positions relates to the amount of independent judgment the position requires; non-management personnel hold positions in which such judgment is exercised only to a limited extent.

Desirable employment qualifications for entry level management jobs vary, depending on the size and philosophy of the employing bank. While some banks, particularly larger ones, favor persons with M.B.A.s, other employers hire individuals without graduate degrees. Generally, a college degree is a minimum requirement for administrative positions, although clerks and tellers without college educations occasionally are promoted into management. Some banks prefer that prospective employees have undergraduate backgrounds in business, but this preference is not universal and there are opportunities for persons with other college majors to obtain jobs in bank management. Previously entry level management personnel often went through a general management training program before specializing in a particular banking function, but there is a current trend among some banks to hire persons for specific areas or jobs. Movement from entry level positions into higher levels requires experience and ability; attending banking courses or workshops may accelerate promotion opportunities.

Because banking is a large, diverse field with over 14,000 banks operating in this country, there are several different professional associations. One of these organizations is the American Banking Association (ABA), with the American Institute of Banking (AIB) serving as its educational arm. AIB is organized into local chapters, of which thirty-four are in Pennsylvania. ABA's state affiliate, Pennsylvania Bankers Association (PBA), is connected with the Pennsylvania Institute of Banking (PIB). The Independent Banking Association of Pennsylvania, associated with the Independent Bankers Association of America, represents smaller banks, and has far fewer members than PBA. The Bank Administration Institute (BAI), originally geared towards bank auditing departments, now addresses the whole range of bank functions. The Bank Marketing Association (BMA) focuses on the marketing aspect of banking, and has local and regional chapters. The Consumer Bankers Association (CBA), for commercial banks, is interested primarily in retail bank management or consumer banking. Membership in each of these associations is by institution rather than individual; a bank will generally appoint a designate to serve as the contact person for the association. One organization which is composed of individual members is the National Association of Bank Women (NABW) which is organized into about 280 local chapters throughout the country.

CLIMATE FOR CONTINUING EDUCATION

The banking industry abounds with educational opportunities, many of which are provided through national and state professional associations. AIB coursework is offered through local chapters or study groups, usually in either a seminar or workshop format. Correspondence courses are also available through AIB. Their educational offerings cover nearly every facet of banking and bank operations; however, most of its courses are geared to entry level bankers. The Banking Professions Group of ABA also provides conferences, workshops, and resident school sessions within different fields, such as agricultural banking or housing and real estate finance. One example is the ABA-sponsored Stonier Graduate School of Banking, an advanced banking management school directed toward leadership development for commercial banks. BAI offers a summer school for bank administration; numerous short seminars in the fields of accounting, audit, executive level interests, management development, human resources, operations, regulations, security, and trust; and conferences on topics such as technology, security, and check progressing. They also are developing alternative delivery methods such as computer-based education and audio teleconferencing. CBA sponsors a Graduate School of Retail Bank Management, seminars on such current topics as truth in lending and recently enacted federal regulations, and an annual government relations forum. BMA's continuing education program includes seminars, an information center, and pre-packaged staff training programs. NABW offers several seminars emphasizing management skills. Bank managers also may participate in management seminars provided by the American Management Association.

State and local organizations provide additional programming. PBA sponsors a middle level banking school held at Bucknell University each summer, and the association recently developed human relations skills seminars for middle management. Penn State and IBAP co-sponsor a seminar for senior bank officers and one for bank boards of directors. Local chapters of national organizations often have educational components in their meetings as well.

Other continuing education opportunities are provided by institutions, commercial providers, and banks. Large banks, for instance, may develop their own in-house professional development programs; the extensiveness of their offerings depends on their size and resources. Citibank in New York recently entered the field of continuing education providers through a series of timely seminars in the areas of bank management, fee/deposit growth, operations/productivity, and funding/investment. Citibank is the first bank to offer such programming to bankers across the country.

The proliferation of continuing education programs attests to the value bank managers and officers place on staying current. In a field where bank regulations are constantly changing and competition for consumer business is keen, bankers cannot afford to ignore educational opportunities. Senior level officers generally attend any workshops or programs they feel would be valuable. Entry and middle level management personnel may be asked to participate in programs relevant to their specific function.

Human resources management and human relations skill training are critical to first line supervisors, since they have the closest contact with non-management level personnel. With increased competition between banks, training in useful marketing strategies is also needed. Due to the diversity of courses presently offered, it is difficult to pinpoint programming which does not duplicate current offerings. Concentration on functional areas such as management or interpersonal skills might be more beneficial than developing programs on specific topics such as automated tellers and commercial credit. It also might be feasible for universities to cooperate with AIB and offer courses that would yield credits from the university and AIB.

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CHILD DAY CARE

There is no licensure or certification of child day care personnel in the Commonwealth of Pennsylvania. However, regulations governing the minimal qualifications of child day care personnel are provided through facility licensure requirements which are mandated by the State Department of Public Welfare, Bureau of Child Development Programs.

BACKGROUND INFORMATION

Day care service for children provides out-of-home care for part of the day to children under sixteen years of age, excluding care provided by relatives. There are two types of day care facilities licensed by the State Department of Public Welfare: Group Day Care Homes and Child Day Care Centers. A third type of facility, the Family Day Care Home, must be registered with the Department and certify its compliance with State regulations. All of these facilities may provide care to children with disabilities.

The major categories of staff in child day care centers are those of administrator, director, group supervisor, assistant group supervisor, and aide.

To be an administrator, an individual must meet ONE of the following options:

I. Complete a graduate program at an accredited college or university with a master's degree in administration, early childhood education, child development, special education, elementary education, or the human services field, including at least fifteen credit hours in administration/supervision and/or child development related courses, or

II. Complete an undergraduate program at an accredited college or university with a baccalaureate degree in administration, early childhood education, child development, special education, elementary education, or the human services field, and have three years of work experience in the human services field, including at least two in administration/supervision.

To be a director, an individual must meet ONE of the following three options:

I. Complete a graduate program at an accredited college or university with a master's degree in administration, early childhood education, child development, special education, elementary education, or the human services field; or

II. Complete an undergraduate program at an accredited college or university with a baccalaureate degree in administration, early childhood education, child development, special education, elementary education, or the human services field, and have two years of work experience related to the care and development of children; or

III. Complete an undergraduate program at an accredited college or university with an associate degree or its equivalent in administration, early childhood education, child development, special education, elementary education, or the human services field;* and have four years of work experience related to the care and development of children.

To be a group supervisor, an individual must meet ONE of the following options:

I. Complete an undergraduate program at an accredited college or university with a baccalaureate degree in early childhood education, child development, special education, elementary education, or the human services field;* or

II. Complete an undergraduate program at an accredited college or university with a baccalaureate degree and teaching certification in early childhood education, child development, special education, elementary education or the human services field; or

III. Complete an undergraduate program at an accredited college or university with an associate degree or its equivalent in early childhood education, child development, special education, elementary education, or the human services;* and have two years of work experience related to the care and development of children.

To be an assistant group supervisor, an individual must meet ONE of the following options:

I. Have a high school diploma or GED certification; fifteen credit hours in early childhood education, child development, special education, elementary or the human services field; and have one year of work experience related to the care and development of children; or

II. Have a high school diploma or GED certification and three years of work experience related to the care and development of children.

*An individual must have fifteen credit hours related to the disabilities of the children with whom he or she will work to be employed in this position at a specialized or integrated day care center for disabled children.

grandfathered in under the new facility licensure regulations. Many of them did not meet the minimum requirements. For this reason, and because there is a diversity of staff qualifications for the varied positions, there is great disparity in the qualifications of child day care staff.

There are approximately 973 licensed day care centers in Pennsylvania. Three hundred of these are private day care centers. There are approximately 2,800 family day care homes, and fifty licensed group day care homes. It is estimated that the 2,800 family day care homes represent only about 25 percent of the total family day care homes operating in the Commonwealth.

Of professional organizations for child day care personnel in Pennsylvania, the Pennsylvania Association of Child Care Administrators (PACCA) is the most prominent. It offers an annual conference with educational workshops for practitioners in the field. There is also an association of private day care personnel in western Pennsylvania, and one of family day care providers in the southeastern region.

CLIMATE FOR CONTINUING EDUCATION

Training for Title XX (federal funds under the Social Security Act) day care personnel is provided by the Bureau with funds allocated to each of the four regional districts in the Commonwealth. In each region, one or more individuals are contracted to provide appropriate training, and they may arrange with local colleges or agencies to provide some training. These individuals survey the staff in their area determine training needs, and training needs are also identified in the annual evaluation of programs. When a deficiency is identified, the staff at a facility may be required to undergo training in the deficient area in order to maintain licensure of the facility. Training is free of charge for all staff members who are direct care providers. Practitioners in private facilities may not participate in this training, since it is funded with Title XX federal monies.

A survey of caregivers in home day care facilities indicated they felt a need and desire for additional training. Persons in this position are required to meet the least stringent educational and training requirements of all child day care personnel. Some training is currently provided for these people, but the Bureau is looking into others means of providing further training. One alternative may be the development of a television training program. This would permit delivery of educational programs to caregivers, the majority of whom are in rural areas. A five-part programmed learning series for caregivers, supported by WQED in Pittsburgh and the Health and Welfare Planning Association, was recently broadcast in three viewing areas: Pittsburgh, Erie, and State College. Continuing collaboration between child day care professionals and the public broadcasting system is expected.

Staff members are encouraged by the Bureau to participate in a variety of continuing education programs, especially those offered by colleges and universities. However, individuals must pay their own fees. Participation in degree programs may increase, as a degree is viewed as a primary means of job advancement.

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CHIROPRACTIC

The State Board of Chiropractic Examiners licenses chiropractors to practice in Pennsylvania. It is unlawful for any person to practice chiropractic or assume the title of Doctor of Chiropractic unless he/she is licensed by this board.

LICENSING INFORMATION

To obtain a license to practice chiropractic, an individual must:

I. Be at least 21 years of age and of good moral character.

II. Have completed a minimum of two years of college (60 credit hours) including a minimum of six credits each in biology and chemistry.

III. Have graduated from an approved school or college of chiropractic. The program is generally four academic years in length and a Doctor of Chiropractic degree is granted at its completion.

IV. Pass the specified examinations. If an individual takes the National Board, then only an oral interview and a practical examination must be taken at the state level. If the National Board is not taken, then a state written examination must be taken as well as the oral interview and practical examination. Examination fees are charged.

RELICENSING INFORMATION

To remain licensed, an individual must register biennially by paying a fee.

Continuing education requirements: none.

BACKGROUND INFORMATION

There are two philosophies of chiropractic. One school of thought adheres to the traditional approach to chiropractic, which deals mainly with spinal correction. Chiropractors embracing this philosophy are called straight chiropractors and tend to be affiliated with the newly formed Federation of Straight Chiropractors (FSCO) and with the International Chiropractic Association and the Chiropractic Fellowship of Pennsylvania. The second group deals with a holistic approach to chiropractic, supportive appliances, the use of physical therapy and emergency first aid. Practitioners adopting this approach are called mixers, in reference to their mixing of other methods and philosophies with traditional chiropractic. Mixers tend to join the American Chiropractic Association (ACA) and the Pennsylvania Chiropractic Society (PCS). In Pennsylvania, it appears the majority of chiropractors are mixers although more patients are probably seen by straight chiropractors.

Pennsylvania also has two peer review groups to address the two schools of thought. The Pennsylvania Chiropractor Peer Review is for mixers; the Chiropractic Peer Review of Pennsylvania is more traditional.

This division within the profession has caused some problems regarding accreditation of schools of chiropractic. Currently only CCE is an accrediting agency, and it tends to accredit schools following the mixer philosophy. Straight chiropractors, through their professional associations, hope to gain a parallel means of accreditation through FSCO.

In Pennsylvania, there is one school of chiropractic, the ADIO (Above-Down-Inside-Out) Institute of Straight Chiropractic in Levittown. It is not accredited by CCE but has recently received provisional approval in Pennsylvania. Nationally, there are ten accredited schools of chiropractic, and four or more other schools are operating without accreditation. The latter are primarily schools emphasizing the straight philosophy.

The scope of chiropractic practice in each state is determined by that state's definition of practice. Chiropractors cannot prescribe drugs or perform major surgery. Chiropractors may limit their practice to specific areas, including athletic injuries, diseases and disorders of children, industrial or insurance problems, and mental and nervous disorders. There is no specialty board certification in chiropractic, although ACA offers diplomate status certification on orthopedics and roentgenology.

Pennsylvania and the majority of states include chiropractic services under all commercial health and accident policies written in those states, with the exception of Blue Shield and policies covering civil service employees. Medicare and Medicaid reimbursement is available for chiropractic services.

A certified chiropractic assistant assists the chiropractor under his/her supervision. Presently there are no licensing provisions for chiropractic assistants in Pennsylvania, and few in other states. Illinois has enacted such legislation and a few other states are considering some manner of licensure. Several chiropractic and liberal arts colleges provide educational curricula for their special training. State and national chiropractic organizations, in conjunction with the chiropractic colleges, are developing plans for legislation which would establish a nationwide accredited chiropractic assistant's program.

CLIMATE FOR CONTINUING EDUCATION

Approximately 90 percent of all states require continuing education programs for license renewal. Pennsylvania did have such a statutory requirement but dropped it recently. It was judged an ineffective means of updating for practitioners, and the annual conferences held to enable compliance with the requirement were considered inordinately expensive. Also, it was found difficult to provide a statewide program that could meet the needs of both straight and mixer chiropractors. However, the

Pennsylvania Board of Chiropractic Examiners is considering a regulation to mandate continuing education.

Each accredited chiropractic college maintains an ongoing postgraduate (continuing) education division. Programs, courses, and seminars are provided for the chiropractor's continuing professional education. Continuing education programs for straight chiropractors are focused primarily on new techniques of spinal adjustment. Ongoing research in this area produces a significant amount of new information fairly regularly. The state chiropractic associations offer periodic educational programs, but there is little local programming offered in Pennsylvania. ACA councils on neurology, x-ray, chiropractic diagnosis, orthopedics, internal disorders, and sports injuries offer periodic postgraduate educational programs.

It has been suggested that the role colleges and universities can play in educating chiropractors is at the initial two-year undergraduate level rather than in continuing professional education.

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CLERGY

There are no licensing or certification requirements, or accrediting agencies, either public or private, for clergy in the United States. However, most denominations do have minimum educational requirements for ministers.

BACKGROUND INFORMATION

Clergy serve in many roles in church, government and other institutions. While most serve local congregations in a parish or synagogue, others teach, administer seminaries and other educational institutions, work in social welfare agencies, or serve as campus ministers or chaplains in hospitals, correctional facilities, industry, or the Armed Forces. Still others are engaged in preaching, evangelization, or missionary work.

Educational requirements for clergy vary greatly from denomination to denomination. While some require very little formal education, most require a baccalaureate degree or its equivalent plus study in an accredited or church-recognized seminary. Seminary training is usually broad in scope, but often focuses on theology, philosophy, scripture study, and doctrinal investigation specific to the denomination. Seminary students also study church history, psychology, public speaking, and other disciplines relevant to the responsibilities of the clergy. In addition to seminary training, many clergymen and women pursue additional education to equip them for specific positions after ordination.

Many Protestant denominations require candidates to complete three or more years of postgraduate seminary study before ordination. This study may consist of experiential training as well as formal education. The course of study often leads to the Master of Theology or the Bachelor of Divinity degree. Although additional study may qualify the candidate for the Doctor of Divinity degree, this is seldom required for ordination.

Candidates for the Catholic priesthood must study at least eight years after high school before they may be ordained. Although some priests may study longer, most spend two years in a minor seminary, followed by six years in a major seminary. The course of study usually leads to the Master of Theology degree. This degree, or its equivalent, is ordinarily required before ordination.

Rabbinical students must study from seven to ten years beyond high school. Requirements vary depending upon the branch of Judaism with which the seminary is connected. Conservative and Reform seminaries require five to six years of training beyond the baccalaureate degree, while Orthodox seminaries require training in a prerabbinical program plus at least three years in an ordination program beyond the baccalaureate degree.

CLIMATE FOR CONTINUING EDUCATION

There is a strong interest among clergy for continuing education. Interests include programs in administration, pastoral counseling, sociology, the psychology of religion, human development, and religious studies. There is a need for Penn State to develop and offer programs in these areas for clergy.

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National Center for Church Vocations
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Serra International
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COLLEGE STUDENT PERSONNEL SERVICES

There is no mandatory certification or licensure of college student personnel workers in Pennsylvania.

BACKGROUND INFORMATION

The field of college student personnel services is very broad and encompasses many extracurricular functions within the college or university setting, including academic advising, admissions, career development and placement, financial aid, international student services, student activities, and residence life. Although the positions are diverse, most share the same basic skill areas of management and counseling and report to the same administrative officer, usually the dean of students or student affairs. College student personnel generalists may have responsibility for administering entire program areas, while specialists concentrate their efforts in a more narrowly defined service. Those practitioners who specialize in counseling are described elsewhere in this report.

Entry level positions in college student personnel services generally require a master's degree in counselor education, college student personnel services, or a related area. One to two years of related experience are preferred. A doctorate in higher education, college student personnel services, or counselor education is required for middle to upper management positions. Over 125 colleges and universities nationwide offer college student personnel programs. Penn State offers both master's and doctoral degrees in counselor education/college student personnel services. Other related graduate programs in Pennsylvania are offered at Indiana University, Shippensburg State College, the University of Pennsylvania, Temple University, the University of Pittsburgh, and Duquesne University.

There are an estimated 2,000 to 3,000 college student personnel workers in Pennsylvania's colleges and universities. Numerous national and state professional associations represent their interests. Major associations include the American College Personnel Association (ACPA), the National Association of Student Personnel Administrators (NASPA), the National Association of Women Deans, Administrators and Counselors (NAWDAC), and the American Personnel and Guidance Association (APGA). Pennsylvania affiliates are the Pennsylvania College Personnel Association (PCPA), the Pennsylvania Association of Student Personnel Administrators (PASPA), the Pennsylvania Association of Women Deans, Administrators and Counselors (PAWDAC), and the Pennsylvania Personnel and Guidance Association (PPGA).

Some of the associations have set professional practice and preparation standards for their members. Others are being encouraged to do so by the newly formed Council for the Advancement of Standards, which consists of representatives from the major national college student personnel associations. They are attempting to incorporate group standards into a set of standards that represents the field as a whole. These standards can then be used by any accrediting body that evaluates graduate programs in counselor education/college student personnel services. It is possible that accreditation of academic programs will eventually lead to certification of individual practitioners.

CLIMATE FOR CONTINUING EDUCATION

Continuing education for college student personnel workers is provided mainly by professional associations and their member institutions. Many associations hold annual conferences which include educational components. Workshops and seminars are advertised nationally, but time and cost considerations often limit the participation of entry level practitioners in national programs.

During the past three years, PCPA has sponsored semi-annual workshops, one in the eastern part of the Commonwealth and the other in the west, especially for entry level professionals. PPGA holds an annual educational conference in the fall and is proposing three additional workshops for the coming year. Topics may include leadership development, the non-traditional student, or building community, for example. Continuing education units for workshop attendance are not generally available at this time. However, it is felt that most practitioners are motivated by interest rather than credentialing incentives.

Although there are a number of continuing education opportunities for college student personnel workers in Pennsylvania, they are geographically scattered and there is no overall coordinated continuing education effort. It is difficult for practitioners to get a comprehensive picture of what is being offered where. This is partly due to the number and diversity of institutions engaged in training their own staffs and the staffs of neighboring colleges.

Two levels of continuing education needs can be identified: broad-based management development in areas like budgeting, organizational behavior, time management, productivity, or management by objectives; and education in topical areas such as media technology, government legislation, or leadership development.

The professional practice and preparation standards being developed by the national college student personnel associations emphasize requirements for entry into the field, not for continued practice. It is unlikely that the subject of mandatory continuing education will surface in the foreseeable future.

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CRIMINAL JUSTICE
CORRECTIONS

There is no mandatory certification or licensure of corrections officers or corrections counselors in Pennsylvania, but there are eligibility standards for specific positions as discussed below.

BACKGROUND INFORMATION

There are many support personnel in correctional institutions but the two primary positions are those of corrections officer and corrections counselor.

There are several levels of the corrections officer position ranging from trainee to supervisor. The corrections counselor works in the treatment division of the institution and provides direct counseling to the inmates. Corrections officers and counselors are primarily employed in the nine state correctional institutions (SCIs) in Pennsylvania. The federal penitentiary in Lewisburg, a federal prison camp in Allentown, and county prisons also employ corrections officers and counselors.

An individual wishing to qualify as an entry level corrections officer in an SCI must:

I. Be at least twenty-one years of age.

II. Have a high school degree or its equivalent.

III. Pass a state civil service examination.

IV. Have a physical examination and pass a physical performance test.

V. Go through two background checks, one carried out by the employing institution and the other by the State Police.

An individual selected for employment must complete a four week intensive training program at the State Bureau of Correction Academy at Camp Hill. The employing institution then provides additional training and orientation to the position. After one year of employment, an employee is promoted to the position of Corrections Officer 1, and may advance up to supervisory levels by successfully passing state civil service examinations and receiving satisfactory performance evaluations.

An individual wishing to qualify as a corrections counselor in an SCI must:

I. Meet ONE of the following options:

A. Have five years of progressively responsible human services experience including one year in a services experience including one year in a professional capacity involving casework or counseling services provided in a social service setting; or

B. Have one year of experience in casework or counseling services provided in a social service setting AND a baccalaureate degree; or

C. Have a master's degree in sociology, psychology, counseling, social work, or a related field; or

D. Have one year of experience as a corrections officer in an SCI, AND a baccalaureate degree in sociology, psychology, social work, counseling, or a related field; or

E. Have a baccalaureate degree in sociology, psychology, social work, counseling, or a related field, including a practicum in a correctional setting (institution or probation or parole office); or

F. Have a combination of education and experience which can be substituted at the discretion of the State Civil Service Commission.

II. Pass a civil service examination.

An individual selected for employment must complete a four week intensive training program at the Academy at Camp Hill.

In the state system, there are approximately 1,350 corrections officers and 100 corrections counselors.

The requirements for personnel working in the county prisons are set by each county. However, many corrections officers employed by these prisons are encouraged to participate in the four week training program at the State Bureau of Correction Academy in Camp Hill.

Corrections officers and counselors in federal correctional institutions must meet the same general corrections officer qualification standards. There are several grades (GS 6 to 13) of this position. Promotion to a higher grade is contingent upon meeting general and specific experience requirements, being rated on the basis of an evaluation, and maintaining good physical condition and health.

The general experience requirement can be met in many ways and can include social case work in a welfare agency, active participation in community action programs, or personnel management experience. The specific experience requirement refers to experience in the correctional custody and supervision of inmates in a correctional institution or community based treatment facility. College education can be substituted for training and experience requirements.

All grades require three and one-half years general experience. The length of required specialized experience increases with promotion to higher grades. The specialized experience requirements include satisfactory completion of various federally operated inservice training courses.

At the Lewisburg Federal Penitentiary, there are approximately 175 corrections officers and twenty corrections counselors.

The pay for corrections officers is considered to be good and is viewed by many as an entry level position for college graduates. These people tend to go on to counselor or administrative positions within the system.

CLIMATE FOR CONTINUING EDUCATION

A large amount of inservice training is offered at both the state and federal correctional institutions. The inservice programs provided at the federal institutions are mandated by civil service requirements. This training is offered for newly promoted individuals and for updating purposes. The vast majority of the inservice training is developed and implemented within the system; there is little or no contracting of training services from other agencies or educational institutions. However, employees are encouraged to participate in additional continuing education on their own time. Many of them participate in degree programs in criminal justice and take seminars or courses in management and related areas.

General training seminars are offered at each state institution. These sessions address such issues as drugs, weapons familiarization, and self defense, and are offered approximately every three months. Special programs and seminars are held to deal with topics such as stress and labor relations, and management programs are also provided. The Bureau will contract educational institutions and other agencies (the Federal Civil Service Commission, for example) to provide some of this training.

Employees of the SCIs are also encouraged to participate in continuing education programs offered by various professional associations, such as the American Corrections Association and the Pennsylvania Prison Warden Association, and educational institutions.

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CRIMINAL JUSTICE
LAW ENFORCEMENT

In Pennsylvania an individual wishing to enter the law enforcement field must satisfactorily complete a mandated training program. There is no licensing or certification, however.

MANDATORY TRAINING INFORMATION

The Municipal Police Training Act of 1974 states that an individual wishing to be employed as a law enforcement officer must:

I. Be twenty-one years of age or older.

II. Pass an entrance examination conducted by the police agency.

III. Be the subject of a background check that reveals nothing of a questionable nature.

IV. Meet standards regarding height and weight, and pass a physical examination, including vision tests.

V. Undergo a psychological examination.

VI. Participate in and pass the appropriate training program.

   A. For municipal police officers, this consists of 480-hour course of study. It is offered by the Pennsylvania State Police at the Police Academy at Hershey and the sub-academy at Greensburg, and also by several institutions of higher education in the state.

   B. For state police officers, a six-month training program is conducted at the Police Academy at Hershey.

BACKGROUND INFORMATION

There is a national move toward the certification of educational programs for law enforcement officials, but none toward certification of officials themselves. The Academy of Criminal Justice Sciences has been holding workshops at various locations across the country for the past eight months or so, discussing the issue of program certification. At this time it is still not a nationally accepted concept, however.

Broad areas to be included in the training program for municipal law enforcement officials are prescribed by the Municipal Police Training Act of 1974. The training program is generally given as a twelve-week course, but is sometimes offered by colleges and universities on an extended basis. In this manner the course is stretched out over a longer period of time, with classes held evenings and/or weekends, so that an individual may pursue this training while working at another job. The training program includes interim and final examinations.

The six-month mandated training program for state police officers is offered only at the Police Academy at Hershey. The program is designed by the training division there, with approval from the State Commissioner of Police. Through an arrangement with the Capitol Campus of Penn State, individuals enrolled in this training program are able to take a limited number of credit courses while at the Academy. They may also obtain credit by examination for certain courses at this time. All of these credits would be applicable should the individual pursue a baccalaureate degree.

While Pennsylvania offers a training workshop to qualify individuals for a license to carry a weapon, law enforcement officials are not required to obtain a license through this procedure. Their regular programs include the necessary training, and when sworn in as law enforcement officials they are eligible to carry weapons.

CLIMATE FOR CONTINUING EDUCATION

There are no mandatory continuing education requirements for law enforcement officials. However, they describe themselves as being "in continuous training" on a voluntary basis. Continuing education is provided by in-service programs and by institutions of higher learning both within and outside of Pennsylvania, including Penn State. State and municipal officials may, and often do, participate in the same continuing education programs.

Law enforcement officials express an interest in both credit and non-credit continuing education. Those pursuing a baccalaureate degree do so to increase their opportunities for promotion and to provide themselves with mobility into other, related job areas after retirement. There has been some evidence to indicate that police officers with college degrees are better able to handle the non-law enforcement situations they encounter, such as conflict resolution.

Suggested topic areas for continuing education, in addition to those already available, include crisis intervention and practice-oriented psychology.

Private security is an emerging area of new interest that is related to law enforcement. Individuals with backgrounds in law enforcement who are moving into private security could benefit from continuing education for retraining. However, because of the newness of the private security field there is a dearth of qualified faculty in the area.

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CRIMINAL JUSTICE
PROBATION AND PAROLE

There is no mandatory licensure or certification of probation and parole officers in the Commonwealth of Pennsylvania.

BACKGROUND INFORMATION

A probation officer is charged with the responsibility of conducting investigations for the court and overseeing a juvenile or adult offender when he/she is adjudicated delinquent or convicted of a crime but is released to probation supervision in the community rather than sentenced to an institution. A parole officer is primarily charged with the responsibility of supervising an offender when he/she is released from prison prior to completing the full term of sentence.

Parole and probation officers may be employed at the county level as employees of the county courts or at the state level as employees of the State Board of Probation and Parole.

Probation and parole also exist at the federal level. This group of officers is very small and tends to be composed of "the cream of the crop" of probation and parole officers. Federal probation and parole officers are usually paid higher salaries than state and local officers. The experiential practice requirements for federal officers tend to be more stringent and a master's degree in criminal justice or a related field may be required.

Practice requirements for probation and parole officers may vary slightly from county to county. The general requirements, however, for probation and parole officers at the county or state level are:

I. To have a baccalaureate degree with an emphasis in administration of justice or the social behavioral sciences.

II. To have experience in criminal justice or a related area. This requirement often can be met by a practicum in a degree program or by being employed in a human services agency.

III. To take a county or state developed civil service examination (not required in all cases).

A bill has been introduced which would require forty hours per year of continuing education for state and county probation and parole officers in Pennsylvania. This bill is sponsored by the Pennsylvania Association of Probation, Parole and Corrections.

In general, the field is moving toward some minimum requirement for continuing professional development. Eventually, when a bill requiring continuing education is passed, the profession is expected to move towards licensure. Licensure would be an aid to enforcing the continuing education requirement.

CLIMATE FOR CONTINUING EDUCATION

Approximately eighteen schools in Pennsylvania have either a program or some course work in criminal justice. Penn State offers a baccalaureate degree in criminal justice and master's and doctoral degrees in community systems with an emphasis in administration of justice.

Penn State is also very active in offering in-service training for probation and parole officers as well as for those working in other justice system components. Penn State continuing education programs in related areas include training for juvenile court judges, police executives and supervisors, correctional managers, private security personnel, and others.

The majority of continuing education or in-service training for probation and parole officers is offered in cooperation with various agencies, including the State Board of Probation and Parole and the Juvenile Court Judges Commission.

An annual training conference is provided each year by the Pennsylvania Association on Probation, Parole and Correction.

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DENTAL HYGIENE

The State Dental Council and Examining Board licenses dental hygienists in Pennsylvania. It is unlawful for any individual to practice dental hygiene unless he/she is licensed by this Board.

LICENSING INFORMATION

To practice as a dental hygienist, an individual must:

I. Be at least nineteen years of age.

II. Have completed an approved certificate or degree program in dental hygiene, or have completed four full semesters as a full-time student in an approved school of dentistry.

III. Pay an application fee.

IV. Successfully complete two examinations:

    A. The National Board, a written examination for which there is a specified fee charged.

    B. The North East Regional Board, a primarily practical examination for which a fee is also charged. The North East Board was developed to help establish reciprocity with fifteen states.

RELICENSING INFORMATION

To be relicensed an individual must pay a biennial registration fee.

Continuing education requirements: none.

A dental hygienist who has not practiced for a period of several years (usually ten or more) may be required to show evidence of current continuing education participation.

BACKGROUND INFORMATION

The majority of dental hygienists are trained in a two-year program although there is a trend toward obtaining a baccalaureate degree in dental hygiene. Dental hygienists with a baccalaureate degree may work in public school programs. Those who obtain a master's degree in dental hygiene frequently use it as preparation for teaching in dental hygiene programs. The schools in Pennsylvania offering dental hygiene programs are Temple University, The University of Pittsburgh, The University of Pennsylvania, Montgomery County Community College, Northampton County Community College, Thomas Jefferson University, Williamsport Area Community College, and Luzerne County Community College.

There is a general shortage of dental hygienists in rural areas, but the converse is true in some urban areas. A large number of dental hygienists work only part time, and almost all practicing hygienists are paid on a daily basis with few if any fringe benefits. This situation makes it difficult for them to obtain funding or time off to attend continuing education programs.

The job requirements of a dental hygienist have changed little over the past thirty years. Hygienists have been licensed since their occupation emerged and the job responsibilities have been fairly well defined in licensing regulations. About ten years ago, however, a movement began to expand the responsibilities of dental hygienists. Many expanded responsibilities can be filled by a dental assistant, however, and dentists may prefer to use an assistant because the salary for that individual would be less than that for the hygienist. These duties vary by state according to the restrictions of practice cited in each state's dental practice act.

An individual who joins the professional association for hygienists must join the local, state, and national levels of The American Dental Hygienist Association (ADHA). The state professional association is the Pennsylvania Dental Hygienist Association (PDHA). There are no continuing education requirements for membership in ADHA or PDHA.

The Academy of Dental Hygiene was established by PDHA to recognize continuing education participation. To join the Academy, an individual must have had 3.0 CEUs within the past five years (as approved by ADHA) and to maintain membership, he/she must complete .07 CEUs a year. All of the educational programs offered by the local, state, or national dental hygienist associations may be taken for CEU credit.

CLIMATE FOR CONTINUING EDUCATION

Many continuing education programs are offered for dental hygienists. However, it is often difficult for a hygienist to get time off to attend a conference or seminar, and if time is taken off, it is frequently without pay. Also, hygienists are frustrated by attending educational programs and learning new techniques or methods that they cannot apply in their offices.

There is some feeling among hygienists that the programs offered do not reflect the needs or interests of these practitioners. Some indicate a need for refresher courses in basic subjects, such as nutrition and anatomy, which they had earlier. Others feel the need for more home study courses since it is so difficult to attend seminars and workshops. The northeastern and northwestern sections of Pennsylvania may be particularly suitable to correspondence study as dental hygienists in those areas are fairly isolated from continuing education programs.

Continuing education is offered through the local, state, and national dental hygienist associations as well as through the schools with dental hygiene programs. In Pennsylvania, the local chapters of PDHA are quite active, providing educational programs that generally draw from local resource people such as nutritionists, psychologists, dentists, and other health related professionals.

A limited number of education programs for dental hygienists are offered through the American Dental Association.

There is no action being taken by either the state licensing board or national or state dental hygienists associations to implement mandatory continuing education requirements. This may be due more to the reasons discussed, such as cost, difficulty of getting time off from work, and lack of support from the supervising dentist to implement new procedures or techniques in the office, than to hygienists' desire to remain updated.

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DENTISTRY

The State Dental Council and Examining Board licenses dentists to practice dentistry in Pennsylvania. It is unlawful for any individual to practice dentistry unless he is duly licensed by this board.

LICENSING INFORMATION

To obtain a license an individual must:

I. Complete a minimum of two years undergraduate study including specified courses in the sciences.

II. Be a graduate of an approved program of dentistry and obtain a D.D.S. or D.M.D. degree.

III. Pay an application fee.

IV. Pass three examinations:

  A. The National Board given by The Council of National Board of Dental Examiners, three times a year at the three dental schools in Pennsylvania: Temple University, The University of Pennsylvania, and The University of Pittsburgh. It is a three day written test and is given in two parts; part one is administered at the conclusion of the sophomore year and part two is administered at the conclusion of the student's senior year. While the National Board is widely accepted by dental state boards as fulfilling a part of their licensing requirements, it has no official status in the licensure process. There is a fee charged to sit for the examination.

  B. The North East Regional Board, both written and clinical, which serves as a qualifying procedure for licensure. The examination is a five-part test in clinical dentistry. It is constructed, administered, scored, and evaluated by the state dental board examiners of the fifteen participating states. Remedial courses required for candidates who sustain two successive failures must be completed in an accredited school of dentistry. There is a fee charged to sit for the examination.

  C. The Pennsylvania Dental Law Examination. This is a written examination. The application fee covers the cost of this test.

V. Pay a registration fee.

RELICENSING INFORMATION

Relicensure is obtained by payment of a biennial fee.

Continuing education requirements: none.

BACKGROUND INFORMATION

The American Dental Association (ADA) is the national professional association of dentists. State chapters of ADA are responsible for setting their own policy and standards as they relate to the practice of dentistry in the respective state.

The Pennsylvania Dental Association (PDA) has approximately 6,000 members. The state is divided into ten districts and then subdivided into local chapters. There is a high level of participation and interest in the local chapters.

There are eight specialty areas within dentistry: oral pathology, public health, prostodontics, periodontics, pedodontics, endodontics, orthodontics, and oral surgery. Each of these areas has its own certification board and professional association. Recently some combination specialties, such as orthodontics/ pedodontics and orthodontics/periodontics, have developed.

Specialty certification involves additional training beyond dental training ranging from eighteen months to three years. A dentist can become a specialist through either a certification program or a master's program. Specialty certification comes automatically with either the certification or master's program and is valid for life; no recertification or continuing education is required to maintain the specialty designation.

CLIMATE FOR CONTINUING EDUCATION

The attitude of PDA towards mandatory continuing education as either a relicensure or membership requirement is negative. The Association feels strongly about providing continuing education for its members and favors having members participate on a voluntary basis. It is the general consensus of the Association and Pennsylvania dentists that most practitioners take the initiative to voluntarily participate in some form of continuing education.

The ADA does not provide continuing education programs or courses except through its annual conference, nor does it approve continuing education programs on the state, district and local levels. That function is the responsibility of the state associations if they wish to exercise it.

The local chapters, called study clubs, provide voluntary programs for dentists to study a variety of topics. There is great interest in these study clubs. Credit is given for attendance at the local and district programs and workshops, all of which must be approved by PDA. Programs are given primarily in five areas of the state where practitioners do not have easy access to a dental school.

Some of the areas of programming include X-ray, full mouth reconstruction, malpractice issues, and practice management, particularly as it relates to dental insurance.

Some dentists are members of the Academy of General Dentistry. This association is open to all specialty groups but is primarily geared towards the general practitioner. The Academy has mandatory membership requirements including the completion of 75 clock hours of continuing education every three years. The continuing education programs must be approved by the Academy or the state associations of the Academy. In Pennsylvania, 1,240 dentists are members of the Academy.

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DIETETICS

There is no legal licensure or certification of dietitians in Pennsylvania. However, the American Dietetic Association (ADA) registers dietitians "to protect the health, safety, and welfare of the public by encouraging high standards of performance of persons practicing in the profession of dietetics." Individuals registered by ADA may use the trademarked designation "Registered Dietitian," or "R.D."

REGISTRATION INFORMATION

To become a Registered Dietitian, an individual must:

I. Meet eligibility requirements as follows:

  A. Education

    1. A baccalaureate, master's, or doctoral degree from an accredited college or university is required.

    2. The degree program must be approved by ADA and must meet their academic requirements, which currently are labeled Plan IV. Additional course work is required to "update" work completed five or more years prior to application.

  B. Experience

    1. With a baccalaureate degree, completion of an approved dietetic internship or a three-year preplanned work experience program is required. Experience is incorporated in coordinated undergraduate programs leading to a baccalaureate degree.

    2. With a master's degree, completion of a graduate assistantship or preapproved, postgraduate qualifying work experience is required.

    3. With a doctoral degree, preapproved qualifying work experience is required, and is reviewed individually.

  C. Personal endorsements are to be furnished at the time of application.

II. Pass the registration examination, which is given twice yearly by an independent professional testing organization. The examination fee includes an initial registration fee.

REREGISTRATION INFORMATION

To remain registered, an individual must:

I. Pay an annual fee.

II. Complete seventy-five clock hours of approved continuing education over each five-year period.

BACKGROUND INFORMATION

Dietitians work in a great variety of positions involved with both health maintenance and restoration. Many are employed in hospitals, but a growing number are engaged elsewhere in such areas as consultation, business and industry, education, community health centers, medical centers and a variety of feeding programs. Dietitians specialize in some form of management or nutrition as well as dietetics. An increasing number do private practice consultation.

Dietetics is a mobile profession. ADA identifies a large majority of R.D.s as women who tend to move with their families. For this reason of mobility, national registration is considered preferable to state licensure, or certification, since it eliminates the problems of reciprocity. Dietitians are registered as generalists; while specialized registration does not exist at this time, many dietitians do specialize in a particular area.

All registered dietitians are members of ADA. When registration was adopted in 1969, all dietitians who were ADA members were automatically registered upon payment of the registration fee. In order to maintain that registration, however, these individuals have had to meet the continuing education requirements in the same manner as those dietitians who have been registered by examination.

There are several categories of ADA membership, including Junior Members, Technician Members, and Honorary Members. However, most members are R.D.s. ADA has over 40,000 members, while The Pennsylvania Chapter, The Pennsylvania Chapter, The Pennsylvania Dietetic Association PPDA), has approximately 4,000 members. PDA has six district associations: Philadelphia, Pittsburgh, Northeast, Northwest, Central, and Lehigh Valley.

ADA accredits internships and coordinated undergraduate programs. ADA also approves the two-year programs for dietetic technicians and one-year certificate programs for dietetic assistants. (Dietetic technicians, like dietetic assistants, are not registered. Individuals holding these titles perform routine tasks, such as tray checks.)

ADA is currently engaged in a manpower study to determine future demands for all members of the dietetic team. The dietetics profession is also looking toward the establishment of third party reimbursement for dietitians, with the recommendation that ADA registration be used for determination of eligibility.

CLIMATE FOR CONTINUING EDUCATION

Continuing education programs must be approved in order for an individual to receive credit for participation. Prior approval for national programs is granted by ADA. Each state association, including

PDA, has an approval committee to grant prior approval for programs offered in the state. The state association must be at least co-sponsor of any program it approves. Subsequent approval of a program may be applied for in cases where a program was not offered primarily for dietitians, or was attended by very few dietitians, and hence did not request prior approval.

Dietitians who are located in metropolitan areas or are able to travel to programs offered by state and national associations or private companies have no difficulty in finding enough continuing education programs to meet their needs. Individuals in rural areas and the 200 to 300 R.D.s residing outside of the country may not have an adequate supply of continuing education programs directly related to dietetics available to them. ADA has cassette tapes for continuing education, and there is one correspondence course offered in another state. However, a wide spectrum of correspondence courses less directly related to dietetics, such as business law, computer science, or speech communications, may be used to accrue continuing education credit, subject to ADA approval.

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EDUCATION
ELEMENTARY AND SECONDARY SCHOOL COUNSELING

The Pennsylvania Department of Education (PDE) requires that public school counselors hold a valid professional certificate, issued by PDE, upon recommendation from an institution with a PDE approved program for the preparation of school counselors.

CERTIFICATION INFORMATION

School guidance counselors must hold an Educational Specialist I or II certificate. To obtain an Educational Specialist I (provisional) certificate, an individual must:

I. Meet the competency requirements prescribed by the Pennsylvania Department of Education. These requirements are generally met by successfully completing a M.Ed. or M.S. degree in counselor education.

To be admitted to the master's program in counselor education at Penn State an individual must have 27 credits in at least three of the following five areas with grades that average 3.0 or better: sociology, psychology, economics, education, and anatomy and physiology. Also a minimum undergraduate cummulative average of 2.50 or better is required.

An individual may be admitted as a non-degree graduate student and complete only the certification requirements, not the graduate degree requirements. These decisions are made on an individual basis within the Counselor Education program and are often based upon staff resources and student credentials.

The Educational Specialist I certificate is valid for six years of service in the area for which it is endorsed.

To obtain an Educational Specialist II (permanent) certificate, an individual must:

I. Hold a valid Educational Specialist I certificate.

II. Successfully meet the three year experience requirement as attested to by the counselor's employing school administrator.

This certificate is good for life.

RECERTIFICATION INFORMATION

There is no recertification of school counselors in Pennsylvania.

Continuing education requirements: none.

BACKGROUND INFORMATION

The certification requirements are developed by the State Department of Education which also approves the academic programs for the preparation of counselors. Typically, these programs are affiliated with graduate programs in counselor education. Most of the state colleges and several private institutions including Temple University, Villanova, Duquesne, Westminster, The University of Scranton, The University of Pennsylvania, and The Pennsylvania State University offer such programs.

CLIMATE FOR CONTINUING EDUCATION

Although there are no recertification requirements, most schools encourage their counselors to take additional credit courses. Salary scales with increases for additional education provide incentive for participation in this additional education. Some school districts will reimburse counselors for costs of continuing education.

The counseling field is a changing one, and thus continuing education is considered necessary if an individual is to remain up to date. Counselors also benefit from periodic work on their practical skills. Professional associations, such as the American Personnel and Guidance Association and its subgroups on the state and national levels, provide some continuing education, as do colleges and universities with counselor education programs.

Penn State has offered several workshops for counselors. It has been suggested that counselors outside the school setting, such as those in rehabilitation and mental health facilities, would also benefit from the school counseling continuing education programs.

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EDUCATION
INSTRUCTIONAL MEDIA SPECIALISTS

The Pennsylvania Department of Education (PDE) issues educational specialist certificates (I and II) for instructional media specialists working in public schools.

CERTIFICATION INFORMATION

An individual must first earn an Educational Specialist I (provisional) certificate, then may pursue an Educational Specialist II (permanent) certificate. To obtain an Educational Specialist I certificate, an individual must:

I. Have obtained permanent teaching certification.

II. Have successfully completed a PDE approved graduate certification program in instructional media.

This initial certification is good for three years.

RECERTIFICATION INFORMATION

After completing three years of satisfactory experience at level I, permanent (level II) certification is granted.

Continuing education requirements: none.

BACKGROUND INFORMATION

Instructional media specialists are primarily employed by school districts to design instructional programs utilizing various media resources. Instructional media specialists may also be employed in a school or intermediate unit instructional materials center. Certification is valid for all grade levels.

The demand for instructional media specialists in education has declined over the past few years after peaking in the late 60s to early 70s. As school budgets become tighter, support service positions, including instructional media specialist, are being cut as a fiscal measure. Because of this decrease in demand, many instructional media specialists are pursuing dual certification in areas such as library science or curriculum development to make them more valuable on the job market. However, outside the field of public education there is a substantial demand for instructional media specialists for industrial training.

There are approximately 750 instructional media specialists practicing in the Commonwealth's public education system.

CLIMATE FOR CONTINUING EDUCATION

Pennsylvania schools offering certification programs in instructional media are Clarion State College, West Chester State College, Shippensburg State College, Indiana University, Temple University, University of Pittsburgh, and Penn State. Shippensburg State College and the University of Pittsburgh have experimental baccalaureate certification programs for instructional media specialists as the result of a movement being considered in the state to make instructional media specialist certification a baccalaureate rather than graduate level program. Some schools, such as Clarion State College, also have baccalaureate degree programs in instructional media for individuals going into industry.

PDE provides no formalized training specifically designed for instructional media specialists, although these individuals may participate in relevant inservice programs. They may also receive continuing education through the Pennsylvania Learning Resources Association, a professional association affiliated with the American Association of Educational Communication Technology, and in programs offered by the colleges and universities with certification programs in instructional media.

It appears that the primary updating occurring in the field is resulting from the trend to obtain dual certification.

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EDUCATION
PUBLIC SCHOOL TEACHING

The Pennsylvania Department of Education (PDE), Bureau of Teacher Certification, issues Instructional I (Provisional) and Instructional II (Permanent) certificates to persons whose primary responsibility is teaching.

CERTIFICATION INFORMATION

An individual must first earn an Instructional I certificate, then may pursue an Instructional II certificate. To obtain an Instructional I certificate, an individual must:

I. Earn a baccalaureate degree.

II. Complete a PDE-approved teacher education program. This requirement may be met:

  A. through a baccalaureate degree program in education, or

  B. as a graduate degree candidate, or

  C. as a non-degree graduate student seeking certification.

III. Receive the recommendation of the appropriate administrator of a PDE-approved program.

At this point an Instructional I certificate is issued. It is valid for six years of full time teaching or substituting on a regular basis in Pennsylvania's public schools. (These need not be consecutive calendar years.) The Instructional I certificate may not be renewed.

For permanent certification to teach in Pennsylvania, an individual must earn an Instructional II certificate. To qualify for an Instructional II certificate, an individual must:

IV. Hold a valid Instructional I certificate.

V. Have taught in Pennsylvania for three years.

VI. Have earned at least twenty-four post-baccalaureate collegiate or PDE "approved" in-service credits.

An individual currently certified to teach in another state may submit his/her credentials to the Bureau of Teacher Certification. The Bureau of Teacher Education evaluates out-of-state credentials and documentation of professional experience to insure that the Pennsylvania standards for certification have been met. If an individual holds a valid certificate from another state, the initial Instructional I certificate for Pennsylvania is generally issued. In the case of an individual holding an expired certificate or not meeting all of the Pennsylvania standards, a course of action for obtaining the Instructional I certificate will be recommended. PDE may require the completion of one of more courses to fulfill the current standards, or individuals might be referred to a local teacher preparation institution to complete an approved certification program.

RECERTIFICATION INFORMATION

There is no recertification of teachers in Pennsylvania.

BACKGROUND INFORMATION

The teacher certification procedures described above apply to all instructional areas, kindergarten through twelfth grade. All teacher education programs must be approved by PDE. In addition to having PDE approval, Penn State's programs are accredited by the National Council for Accreditation of Teacher Education.

PDE is considering raising the requirement for Instructional II certification from twenty-four to thirty credits. Also under consideration are changes that would require a certain number of these credits to be at a PDE-approved institution and would specify the types of course credits that may be included. At this time any or all credits required for Instructional II certification may be earned through in-service training programs, institutions of higher education, or any combination of the two.

Many states recertify teachers every two or three years, with a continuing education requirement to be met. The Pennsylvania Association of Teacher Educators supports the concept of recertification for teachers in the Commonwealth, but the Pennsylvania State Education Association (PSEA) is opposed to it. Those in the field of teacher education consider recertification in Pennsylvania unlikely.

The National Education Association (NEA), of which PSEA is a state chapter, would like to control teacher certification rather than having control by state agencies. PSEA supports this idea. To implement the concept, NEA recommends that each state establish a Professional Standards and Licensing Commission (PSLC) to control certification within that state. While Pennsylvania does have a PSLC, it is only advisory in nature. In Oregon, however, the PSLC does control teacher certification in what has been deemed by educators and teacher educators as a satisfactory manner. Essentially this is a system of teachers certifying teachers, which does raise some ethical questions.

It should be noted that PDE also issues Master's Degree Equivalency Certificates for salary purposes only. Individuals holding Instructional I or II certificates are eligible for a Master's Degree Equivalency Certificate after earning thirty-six graduate level credits, with at least eighteen of these credits in the area of the applicant's primary teaching assignment. No more than eighteen of the thirty-six credits may be earned through in-service programs approved by PDE for this purpose.

CLIMATE FOR CONTINUING EDUCATION

Because of the post-baccalaureate credit requirement for an Instructional II certificate, a certain amount of continuing education for teachers is mandatory. In addition, teachers participate voluntarily in continuing education to some extent.

Credits toward Instructional II certification and other continuing education are available to teachers through two major sources: in-service training programs and institutions of higher education.

Prior to 1968, there were no in-service programs offered for credit. In 1968, a program was developed whereby a teacher could earn up to six of the credits required for an Instructional II certificate through in-service programs conducted by school districts. According to PDE, credit for in-service programs was originally developed in response to criticism from teachers and administrators, who stated that the programs offered by institutions of higher education concentrated too heavily on theory and too little on practical information that could be applied in the classroom. Today any or all of the twenty-four credits required for Instructional II certification can be earned through participation in in-service training programs.

PDE has drawn up guidelines for the development of in-service training programs by school districts or intermediate units. Determination of credits to be given for in-service programs is made by PDE after an evaluation of the program. Over the past five years, the number of in-service training programs given in Pennsylvania has grown tremendously; there were approximately 1,000 given in the state in 1978-79.

Proponents of continuing education programs offered through institutions of higher education, rather than through in-service training, believe that the institutional approach offers more thorough coverage of an area, including theory and analysis of the concepts and problems being considered. Teacher educators suggest that in-service training programs often meet short-term, narrowly defined, identified needs, whereas programs offered through colleges and universities tend to be broader and more comprehensive in scope.

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EDUCATION
SCHOOL ADMINISTRATORS

The Pennsylvania Department of Education (PDE) issues the following administrative certificates and letters of eligibility:

Elementary School Principal Certificate
Secondary School Principal Certificate
Director of Vocational Education Certificate
District Superintendent Letter of Eligibility
Assistant District Superintendent Letter of Eligibility
Intermediate Unit Executive Director Letter of Eligibility
Assistant Intermediate Unit Executive Director Letter of Eligibility

CERTIFICATION INFORMATION

To be certified as an Elementary/Secondary School Principal, an individual must:

I. Complete a graduate program approved by PDE.

II. Have five years of professional education experience.

To be certified as a Director of Vocational Education, an individual must:

I. Complete a graduate program approved by PDE.

II. Have five years teaching experience in vocational education.

To receive a District Superintendent Letter of Eligibility, an individual must:

I. Complete a graduate program approved by PDE.

II. Have six years experience in education with at least three at a supervisory or administrative level.

To receive an Assistant District Superintendent Letter of Eligibility, an individual must:

I. Complete a graduate program approved by PDE.

II. Have six years teaching experience (this is for individuals lacking administrative or supervisory experience).

To receive an Intermediate Unit Executive Director Letter of Eligibility, an individual must:

I. Meet ONE of these two options:

A. Have a doctoral degree from a state approved college or university; or

B. Have a master's degree plus forty semester hours of graduate work taken at an institution approved for the preparation of a District Superintendent of Schools.

II. Have six years experience in education with at least three at the managerial or supervisory level.

To receive an Assistant Intermediate Unit Executive Director Letter of Eligibility, an individual must:

I. Meet ONE of these two options:

A. Have a doctoral degree from a state approved college or university; or

B. Have a master's degree plus forty semester hours of graduate work taken at an institution approved for the preparation of a District Superintendent of Schools.

II. Have six years experience in education; managerial or supervisory experience is not required.

RECERTIFICATION

There is no recertification of school administrators. However, the initial certification or letter of eligibility is provisional for three years (Level I). After three years satisfactory performance at Level I, permanent (Level II) certification is granted.

Continuing education requirements: none.

BACKGROUND INFORMATION

The functions of the administrator are to direct, operate, supervise, and administer the organizational and general educational activities of a school or schools.

The size of the administrative staff varies by school district. There is a minimum of one principal per school and one district superintendent per school district. As the size of the school or district increases, the number of assistants also increases.

For the 1978-79 school year, there were 2,532 elementary, 982 secondary, and 382 combined (both elementary and secondary grades) schools operating in Pennsylvania.

CLIMATE FOR CONTINUING EDUCATION

Fourteen institutions in Pennsylvania are approved by PDE to provide certification programs for elementary school and secondary school principals; six institutions provide PDE approved programs for the Superintendent's Letter of Eligibility; and three schools offer approved programs for Director of Vocational Education certification. Temple University, University of Pittsburgh, and The Pennsylvania State University offer programs for all three administrative levels. There are no formalized programs for the preparation of Intermediate Unit Executive Directors.

There is no mandated inservice training for school administrators. However, studies have shown that administrators feel a need for updating in their field, particularly in areas of budget management and school finance, energy management, education law, and personnel negotiations.

The training and educational needs of administrators vary depending on the size of the school or school district. For example, a superintendent of a small rural district may need to be more of a generalist while the superintendent of an urban district can delegate many responsibilities to a staff of assistants and concentrate his or her efforts on specific issues.

Training and updating opportunities for school administrators are available through several delivery systems. Formal and informal courses may be taken at colleges and universities. Educational programs and workshops are offered by professional associations such as the state principals associations and the Pennsylvania Association of School Administrators. The State School Board Association releases publications and information for administrators. PDE operates an Executive Academy, which provides problem solving sessions for interested school administrators.

Four study councils, located at the University of Pennsylvania, University of Pittsburgh, Lehigh University, and The Pennsylvania State University also offer workshops and programs. School districts, not individual administrators, may join any number of these study councils. Superintendents, I.U. executive directors, and their assistants are the main client groups. Some councils allow other individuals such as school board members and program coordinators to attend the sessions. The Pennsylvania School Study Council (PSSC) at Penn State has approximately thirty percent of the state's school districts as members.

School administrators have difficulty with time management; as a fifty to sixty hour work week is not unusual. This is due primarily to the community's desire to have administrators participate in various local organizations as well as to the demands of the job. This makes it more difficult for school administrators to not only prioritize their time, but to set aside time for continuing education.

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EDUCATION
SCHOOL PSYCHOLOGISTS

School psychologists must be certified by the Pennsylvania Department of Education in order to be employed by a school district. School psychologists in private practice must be licensed by the State Board of Psychologist Examiners, or be supervised by a licensed psychologist, as described in the section of this manual on psychologists.

CERTIFICATION INFORMATION

School psychologists must hold an Educational Specialist I or II certificate. To obtain an Educational Specialist I (provisional) certificate, an individual must successfully complete an accredited sixty hour graduate program in school psychology, including 1,000 hours of supervised work with children.

The Educational Specialist I certificate is valid for three years.

To obtain an Educational Specialist II (permanent) certificate, an individual must:

I. Hold a valid Educational Specialist I certificate.

II. Successfully complete three years of supervised experience as attested to by the psychologist's employing school administrator.

This certificate is good for life.

School psychologists from out of State may apply for certification directly to the Department of Education.

RECERTIFICATION INFORMATION

There is no recertification of school psychologists in Pennsylvania.

Continuing education requirements: none.

BACKGROUND INFORMATION

In 1979-80, there were approximately 1,600 certified school psychologists in Pennsylvania, 659 of whom were employed as psychologists in Pennsylvania schools. Psychologists working in school settings test and evaluate children, particularly to meet the requirements for special education and gifted programs, do counseling, and consult with community members, parents, and school personnel. School psychologists increasingly are involved in due process proceedings. Certified school psychologists with other areas of certification may work in such educational specialties as pupil personnel services. Psychologists also may be engaged in private practice if they are licensed or work under the supervision of a licensed psychologist.

All certification programs in Pennsylvania institutions must be approved by the Pennsylvania Department of Education (PDE). Schools which offer accredited programs include Bryn Mawr, Bucknell, California State, Duquesne, Edinboro State, Indiana University of Pennsylvania, Lehigh, Marywood, Millersville State, The Pennsylvania State University, Temple, University of Pennsylvania, and University of Pittsburgh. Two additional accreditation mechanisms exist through the American Psychological Association (APA) and the National Council for Accreditation of Teacher Education (NCATE). Penn State's program is approved by PDE, APA, and NCATE; APA approval is necessary for licensure requirements, and NCATE accreditation assists in obtaining reciprocal certification in other states.

Penn State's graduate program leads to certification and a doctorate, and admission is based on a combination of scholastic average, references, and test scores. An undergraduate background emphasizing psychology and/or special education is preferred.

There are two national professional organizations for school psychologists, both of which have Pennsylvania affiliates. The largest national group of psychologists is APA, with a division specifically for school psychologists. The Pennsylvania Psychological Association (PPA) is its associate at the state level. A newer organization, the National Association of School Psychologists (NASP), represents a substantial number of school psychologists; members generally do not agree with APA's emphasis on doctoral degrees and its orientation towards specializations in addition to school psychology. A newly formed Pennsylvania organization, the Association of School Psychologists of Pennsylvania (ASPP), is expected to affiliate with NASP.

CLIMATE FOR CONTINUING EDUCATION

School psychologists might participate in continuing education programs for several reasons. They need to have current and accurate information on mandated programs, due process procedures, and other legal aspects of school psychology. School psychologists are also interested in updating their techniques, developing new ones, and learning of trends within the field of general psychology as well as school psychology. Continuing education programming in other specialty areas such as marriage counseling would be particularly helpful for licensed school psychologists wishing to engage in private practice with a focus other than school psychology. Master's level psychologists might participate in continuing education if the coursework were part of a doctoral program, since only about 10 percent of all school psychologists have doctorates. The University of Pittsburgh offers such a program on a part time basis.

Penn State's doctoral program requires one year of a supervised internship beyond certification. Because in-service training should be a strong part of this internship, and interns are scattered throughout the state, there might be a need for some type of innovative continuing education programming.

Currently there is not much continuing education available to school psychologists within Pennsylvania. An annual fall conference for school psychologists hosted by Penn State attracts about 200 participants each year. Intermediate units provide some continuing education through in-service training and other meetings; these often deal with legislative issues. PPA holds two conferences annually, but plans to expand its continuing education programming by offering workshops at locations throughout Pennsylvania.

Although APA approval of continuing education sponsors is considered desirable, there are just two APA-approved sponsors in Pennsylvania: Western Psychiatric Institute and PPA. If continuing education becomes mandatory for psychologists, attendance at APA-approved programs will be accepted most readily as evidence of meeting the requirements established. Even without a continuing education requirement, psychologists are probably more likely to attend APA-approved continuing education programs.

NASP has standards for credentialing which include continuing education requirements, but because most state departments of education do not recognize the standards, the Association's requirements are somewhat meaningless.

Penn State has a psychology course number (Psychology 497) which was developed for use in offering continuing education credit courses. There appears to be some eagerness from school psychologists to participate in programming which would yield credits or CEUs. Because the total number of school psychologists is small, however, it might be necessary to conduct such courses or programs in major cities, or to employ correspondence study, cassettes, or other self-study mechanisms to reach the diverse audience.

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EMERGENCY MEDICAL TECHNOLOGY

Voluntary certification for Emergency Medical Technicians (E.M.T.s) is provided by the Pennsylvania Department of Health. However, this certification may be a mandatory requisite to work with a county or local emergency service squad. National voluntary certification also exists for E.M.T.s but it is not recognized by The State Department of Health.

BACKGROUND INFORMATION

E.M.T.s do not fall into the traditional definition of an occupation primarily because the vast majority of E.M.T.s are volunteer workers. In Pennsylvania, approximately 80 percent of those serving as E.M.T.s are volunteers. Because of this, the motivation of individuals who fill E.M.T. roles affects their perspective and ability to participate in training and education programs. The time invested in training is not necessarily seen in the same terms as time invested in training for a paying job.

There are two levels of E.M.T.s; the basic level is the E.M.T., the advanced level is the paramedic. Requirements to become an E.M.T. are standardized by the State Department of Health. Requirements to become a paramedic parallel those of the E.M.T., but require three or four times the hour commitment. Specific content of the paramedic course may vary from community to community based upon the input of the course medical director.

To become a State Department of Health certified E.M.T., an individual must:

I. Have a minimum of 94 clock hours of training in several areas including patient assessment, basic life support, oxygen administration, and fractures.

II. Pass a two part examination: skills (practical) and written. The written part can be taken only if the practical part has been passed. If the practical is not passed, one retake is allowed. One retake is also allowed on the written part. Otherwise, an individual must go through the training program again.

Certification is good for three years.

To be recertified, an individual must:

I. Take a retest by one of the following options:

A. Take a two-part challenge examination (skills and knowledge). No retest is allowed on either part. If it is failed, the individual must take a refresher course. The refresher course varies from a minimum of 20 to a maximum of 40 hours.

B. Take a refresher course and pass the certification examination.

C. E.M.T. instructors need only pass the written portion of the challenge examination.

An estimated 80 percent of ambulance operators in Pennsylvania are certified E.M.T.s. Since 1972, approximately 30,000 E.M.T.s have been certified in the Commonwealth, although only about 18,000 have maintained certification. There is approximately a 50 percent turnover rate every two to three years. This high attrition is attributed to the intensity of the job and the lack of opportunity for advancement.

CLIMATE FOR CONTINUING EDUCATION

All training programs for E.M.T.s are coordinated and administered by nine regional Emergency Medical Service (EMS) councils. These councils are in turn responsible to the State Department of Health. Approximately 300 to 400 classes are given per year throughout the state. These classes are offered at vo-tech schools, community colleges, hospitals, and local ambulance clubs. Penn State offers courses for both E.M.T.s and paramedics.

The cost of these training courses varies from free to the cost of tuition for a college credit course. It is difficult to expect volunteer workers to pay for their training when it can be received free from an EMS council. Very few communities underwrite the cost of providing training for ambulance personnel; however, many ambulance organizations may provide reimbursement for some training courses.

The Pennsylvania Ambulance and E.M.T. Association, which is affiliated with The National Association of E.M.T.s, has provided some continuing education for E.M.T.s. However, attendance at its conferences has dropped in the past couple of years. This decrease has been attributed to the conference costs that an E.M.T. must pay to attend.

The E.M.T. course offered at Penn State is held at University Park. Plans are underway to expand the course to other locations in the state. These efforts are limited by financial resources as new training equipment will have to be purchased.

It has been suggested that continuing education field staff members work with the community to help plan and develop programs of this type when the need is shown to exist. The greatest demand tends to be for paramedic training, due to the desire for higher certification levels. Postcertification programs are in less demand because of the absence of Pennsylvania Department of Health continuing education requirements.

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ENGINEERING

The Pennsylvania State Registration Board for Professional Engineers licenses engineers under the general designation of "Professional Engineer." Licensing examinations currently are given in the following disciplines:

Aerospace Engineering
Agricultural Engineering
Ceramic Engineering
Chemical Engineering
Civil Engineering
Electrical Engineering
Fuel Technology
Industrial Engineering
Manufacturing Engineering
Mechnical Engineering
Metallurgical Engineering
Mining Engineering
Nuclear Engineering
Petroleum Engineering
Sanitary Engineering
Structural Engineering

LICENSING INFORMATION

To be licensed, an individual must:

I. Be twenty-five years of age, of good character, and able to speak and write the English language.

II. Pass the Engineer in Training (EIT) examination common to all disciplines. To be eligible to sit for this examination, an individual must pay a fee and either:

  A. Be a graduate of a four-year or more engineering or engineering technology program in an approved institution of higher education, or

  B. Have four years of engineering experience, as attested to by a Professional Engineer.

III. Pass the Professional Engineer (PE) examination in his/her discipline. To be eligible to sit for this examination, an individual must have four years of engineering experience and pay a fee.

An individual holding an unexpired license or certificate of registration issued by the proper authority of another state, territory, or country having requirements comparable to those in Pennsylvania may be licensed in Pennsylvania without examination.

RELICENSING INFORMATION

To maintain licensing, an individual must renew the license biennially by paying a fee. Licensing periods run from December 1 of each even-numbered year to November 30 two years hence.

Continuing education requirements: none.

BACKGROUND INFORMATION

Beginning April, 1979, the State Registration Board for Professional Engineers in Pennsylvania changed from state-designed PE examinations to the National Council of Engineering Examiners (NCEE) examinations. These examinations, given in April and November of each year, are used by fifty-one states and territories.

NCEE designs and grades all PE examinations, and makes recommendations regarding what might constitute a passing score. Examinations are administered by a testing service, under contract to the Board. Each state may define its own passing score, but in the interest of simplifying reciprocity rulings, states tend to follow NCEE's recommendations. Pennsylvania is using the NCEE-recommended passing score. The Educational Testing Service prepares and grades all EIT examinations.

The Professional Engineers Registration Law is a practice act designed to protect the public. All persons engaged in the practice of engineering must be licensed Professional Engineers, except those employed in industry or public utilities. Engineers in these two areas are exempt from the Professional Engineers Registration Law, but each industry or public utility engaged in engineering work must have one Professional Engineer on its staff who is designated "engineer in responsible charge." Exemption of engineers employed by industries and public utilities is based on the fact that these organizations are engaged in product engineering rather than in public engineering; therefore their work does not directly affect the public.

Some states license engineers from all disciplines under the general designation of Professional Engineers, while others license them as professional engineers in a specified discipline. Pennsylvania uses only the general designation, so theoretically a licensed Professional Engineer could work in any engineering discipline. However, the Professional Engineers' code of ethics, as well as public acceptance, prevents engineers from practicing in areas in which they are not competent.

The National Society of Professional Engineers is the nationwide professional organization, and the Pennsylvania Society of Professional Engineers (PSPE) is a member of that organization. There are approximately 35,000 Professional Engineers licensed in Pennsylvania. Of these, approximately 20,000 are Pennsylvania residents. The remaining 15,000 live outside of the state but practice in Pennsylvania. Approximately 5,000 of the 20,000 Professional Engineers residing in Pennsylvania are members of PSPE.

In addition to the professional organization each discipline has its technical society (e.g., American Society of Mechanical Engineers). These also are national organizations with state, local, and/or regional chapters.

CLIMATE FOR CONTINUING EDUCATION

Because the field of engineering is moving rapidly, engineers must make an effort to remain current; they cannot do their job, and people will not hire them, if they fail to do so. For this reason, Professional Engineers engage in continuing education activities voluntarily, and in fairly large numbers. PSPE encourages its members to participate in continuing education activities, and offers quite an extensive range of programs. The technical societies also have large continuing education programs. Penn State and other institutions of higher education also offer continuing education programs for engineers.

Continuing education programs offered at organizations' meetings or in metropolitan areas appear to be the most successful; a critical mass of Professional Engineers is of course necessary to warrant offering a program. This is also true for courses designed to prepare engineers for the PE examination.

Mining engineering and nuclear engineering are two disciplines with particular implications for continuing education at Penn State. Penn State's resident instruction and research programs in these two fields are unique in the state, and because of this, Penn State represents a center of expertise in terms of faculty and equipment (e.g., the Breazeale Nuclear Reactor Facility is the only research and training reactor in Pennsylvania and New Jersey). Therefore, Penn State is able to offer continuing education programs that utilize these capabilities.

In addition to these factors, nuclear engineering is a relatively new discipline. As such, it is experiencing a wide-spread, rapid growth of information, making continuing education almost essential for anyone working in the field.

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FORESTRY

There is no mandatory licensure or certification of professional foresters in Pennsylvania.

BACKGROUND INFORMATION

Approximately one half of the nation's foresters are government-employed. In Pennsylvania, federal foresters are employed at the Allegheny National Forest, the only federal forest in the state. The largest state employer of foresters in Pennsylvania is the Bureau of Forestry. Other prominent government employers include wildlife management agencies, recreation and parks bureaus, and soil conservation units. Foresters also find a considerable number of employment opportunities in the private sector. The major sources include forest product industries, public utilities, forestry consultants, and various management and engineering firms dealing with natural resources management.

Nationally, there are about 1,500 to 2,000 forestry graduates a year; about 100 of those graduate from Penn State, which has the only accredited four-year and graduate forestry programs in the Commonwealth. Penn State's Mont Alto campus and Williamsport Area Community College offer two-year technician programs in forestry. In recent years 60 to 70 percent of Penn State's four-year program graduates have obtained professional employment within one year of graduation, and an additional 10 to 15 percent have pursued advanced degrees in forestry and allied fields.

To work for the Federal Forestry Service, an individual must meet U.S. Civil Service qualification standards. There are three options for meeting the basic requirements for all professional forestry grades.

I. Have a baccalaureate or graduate degree from an accredited college or university with major study in forestry or a closely related subject matter field, or

II. Have at least thirty semester hours of course work from an accredited college or university in any combination of biological, physical or mathematical sciences or engineering, of which at least twenty-four semester hours are in forestry, PLUS supplemental experience and education or four years of education, or

III. Candidates for administration positions must complete the requirements of I. or II. above, or meet the grade requirements for one of the following:

(A) range conservationist
(B) soil scientist
(C) wildlife biologist
(D) geologist

(E) engineer

and have supplemental professional experience gained in a forestry work situation.

There are additional experience and training requirements for higher grades. As the forester advances in levels of responsibility, he or she is expected to participate in continuing professional development as a method of keeping updated.

To work for the Commonwealth as a professional forester, one must meet minimum State Civil Service requirements; there is no fee for application. An applicant must:

1. Be a Pennsylvania resident, of good moral character, and physically capable of performing the duties of the position.

2. Have a baccalaureate degree with major course work in forest management from a college or university accredited by the Society of American Foresters. Copies of official college transcripts must be submitted with the application.

3. Possess knowledge of basic disciplines of forest management, the operation of power equipment used in the logging of timber, and road construction and maintenance.

4. Have skill in the use of all standard surveying instruments.

5. Possess the ability to learn new principles and current practices involved in the technical area assigned and establish and maintain good working relationships with work associates and the general public.

An examination is made of the applicant's record of education and experience. The applicant is then rated. Employment lists are established ranking successful applicants in order of their final earned ratings.

Licensing has been debated among foresters. In Pennsylvania, several bills have been introduced over the past decade to provide for either registration or licensing of foresters, but none have been successful.

The licensing issue has been hindered by difficulty in setting specific requirements for this diversified profession and an inability to gain legislative support. Proponents stress that licensing will protect the public from incompetent foresters or imposters. Opponents of licensing acknowledge the potential for this problem but maintain that the number of individuals affected is negligible.

CLIMATE FOR CONTINUING EDUCATION

As the forestry profession continues to specialize, the potential for continuing education increases. Penn State has offered various continuing education programs, including symposia on genetics, forest hydrology, and reclamation of disturbed lands. A two-week program in Administrative Management for Resource Managers is offered every year in December at University Park, and is geared towards the development of management skills in the forestry profession. Penn State's Cooperative Extension Service also offers some forestry-related programs to land ownership groups, industry units, and professional audiences concerned with the management and use of forest resources.

Other continuing education opportunities for foresters include regional, two- to three-day meetings produced by the U.S. Forest Service and allied agencies. These meetings are sometimes open to professionals outside the federal service. Also, the Society of American Foresters coordinates various scientific meetings, but as a rule does not offer formal educational programs. However, local and regional chapters of this organization have sponsored seminars and workshops concerning forest management issues and practices.

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FUNERAL DIRECTION

The Funeral Director Law regulates the licensure of persons engaged in the preparation and disposition of the bodies of deceased persons in Pennsylvania. The State Board of Funeral Directors administers and enforces this Law.

LICENSING INFORMATION

To be licensed as a funeral director, an individual must:

I. Be at least twenty-one years of age and of good moral character.

II. Be a high school graduate.

III. Complete at least two years or sixty hours of college course credits.

IV. Complete at least one year as a student trainee in an approved mortuary school, after which a six hour, comprehensive national written examination must be passed.

V. Complete at least one year as a resident intern working under a registered preceptor in a funeral establishment.

VI. Apply for and pass a written, oral, and practical state examination. Application must include case histories of fifty bodies cared for by the applicant, including all aspects of embalming and working with the bereaved families and the deceased, and payment of a fee.

VII. Pay a licensing fee.

The widow or estate of a deceased funeral director shall receive a restricted license to continue operation of the deceased's establishment.

RELICENSING INFORMATION

Licenses expire February 1 of each even-numbered year, and may be renewed by payment of a fee.

Continuing education requirements: none.

BACKGROUND INFORMATION

The funeral director of today is viewed as a new entity. The family business, passed on from generation to generation, has all but disappeared. Changes have also occurred in the science and technology of funeral directing. Pennsylvania's requirement of sixty college credits for licensure is somewhat unusual, but is designed to meet the needs of the modern funeral director by providing him/her with a general education.

The sixty credits required for licensure may be in any subject area. However, it is suggested that students interested in becoming funeral directors should concentrate on the sciences, including pathology, physiology, and anatomy; bookkeeping; business law; management; sociology; and psychology.

The student who has completed sixty or more credits may apply for a student traineeship at one of about twenty-five schools in the country. There are two schools of mortuary science in Pennsylvania, one in Pittsburgh and a newly established one in the Bethlehem area. Because of the variation in state laws, a student should attempt to attend school in the state in which he/she wishes to practice whenever possible. Screening for mortuary school is not terribly comprehensive, but usually a 2.4 or 2.5 average and an interview are required. The Board registers all applicants for student traineeships, and there is an annual registration fee.

Upon completion of the student traineeship and passage of the national examination, a student must find his/her own internship. The Board registers interns, for which an annual fee is charged. This phase of training is completed under the supervision of a licensed funeral director in good standing who has registered with the Board to serve as preceptor for one student intern or more, and has completed the required preceptor's course. The internship is to consist of twelve full, continuous months with a minimum of forty hours of experience per week. The state examination given at the conclusion of the internship is 15 percent oral, 15 percent practical, and 70 percent written. Applicants must maintain an average of 70 percent in the three sections of the examination.

There is an extremely high turnover of people working in this field. In the five year period following entrance into a student traineeship, a majority of the people leave the profession. Attrition continues after this period, but at a slower rate. Because of this large turnover, there is always a demand for funeral directors. Supply and demand in the field remain fairly even, however. The high attrition rate is attributed largely to the degree of job dedication, or involvement, that is required of funeral directors. Scheduling is virtually unheard of in this field, since timing of work is totally unpredictable. A funeral director must always be available within twenty to thirty minutes, and is on call at all hours. Attempts are being made to provide funeral directors with some personal time through the use of better scheduling and electronic technology, such as telephone call forwarding. However, time demands will always be great.

The license granted by Pennsylvania is that of "funeral director and embalmer." Such dual licensure is employed to assure that a funeral director is qualified in all aspects of his/her work. The three major thrusts are funeral directing and counseling, care of the deceased, and mortuary management. A funeral director may engage in practice in only one location at a time, but may assist at a branch location of the same business.

The Pennsylvania Funeral Directors Association is a chapter of The National Funeral Directors Association. Both professional associations meet once yearly. In Pennsylvania there are also twelve district associations which meet every two months. In addition to the groups, which are open to all licensed funeral directors, there are several invitational groups. These groups are somewhat political in nature, and members refer out-of-town work to other members of their organization.

CLIMATE FOR CONTINUING EDUCATION

While continuing education is not required for practitioners at this time, it is described as being "on the horizon." There have been attempts to enforce a periodic education review of licensed practitioners, with thirty hours of continuing education every four years as the recommended requirement. Voluntary continuing education participation is significant, with programs being provided by mortuary schools and the state and national professional associations.

The changing nature of funeral directors (as described earlier) and their interest in both voluntary and mandatory continuing education suggest a need for general educational programs in the biological sciences, psychology and sociology, and business law and management.

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HEALTH SERVICES ADMINISTRATION

There is no mandatory licensure or certification of health services administrators in Pennsylvania, with the exception of nursing home administrators, described elsewhere in this report.

BACKGROUND INFORMATION

Health services administrators direct the various functions and activities that make a health organization run smoothly and efficiently. From the largest general hospital to the smallest walk-in clinic, health administrators provide effective management under the supervision of a board of directors or other governing body. They are responsible for many kinds of management decisions regarding personnel, budgets, facilities planning, and departmental operations. In small organizations, administrators must be generalists; in larger ones, they often delegate the supervision of daily operations to assistant administrators. In addition to their regular management activities, many health administrators organize fund raising drives and promote public participation in health programs. They also may represent the interests of their organization on a regional health planning board.

The majority of health administrators work in out- and in-patient care facilities such as hospitals, clinics, nursing and personal care homes, and health management firms that provide administrative services for a fee. Others work for governmental organizations or for voluntary health agencies such as the American Cancer Society or the Heart Fund.

Educational requirements for health services administrators vary according to the size and nature of the employing organization and the position's relative level of responsibility. In general, larger organizations with a more complex administrative structure require more education than do smaller units. A master's degree in public health or hospital administration is the preferred preparation for the position of chief, associate, or assistant hospital administrator. Graduates of master's degree programs in public administration or business management with health care experience also are hired for these positions. Administrative assistant or department head positions in hospitals generally require at least a baccalaureate or associate degree in health care administration, or a baccalaureate degree in business administration and training or experience in health care. Career advancement without a master's degree is becoming uncommon.

Pennsylvania universities that offer master's degrees in public health/hospital administration include the University of Pennsylvania and the University of Pittsburgh. Both programs emphasize a residency and practicum experiences in at least two different settings, including health care and a related area such as health insurance, health planning, or public health. Penn State offers advanced degrees in the health planning and administration option of the community systems planning and development program. There is a required, non-credit practicum.

The major professional associations for health services administrators are the American Hospital Association (AHA) with its Pennsylvania affiliate, the Hospital Association of Pennsylvania (HAP) for administrators of all kinds; the American Public Health Association (APHA) for public health administrators and educators; the Federation of American Hospitals for commercial hospitals; and the American College of Hospital Administrators (ACHA) for upper level administrators. All of these associations hold annual conferences and publish journals and/or newsletters for their members. Since there are so many different areas of specialization within health services administration, the associations are usually divided into subsections representing types of settings or concerns such as out-patient and primary care facilities, human resources, material management, medical education, and hospital security.

Membership in ACHA resembles certification designations offered by associations in other professions. A person desiring membership must possess a specified combination of academic degrees and work experience to qualify as a nominee. After a nomineeship period of three years, ACHA grants formal membership to those nominees who successfully complete oral and written examinations. Three approved references and an annual fee also are required for admission. ACHA membership is widely recognized as a mark of professional distinction.

CLIMATE FOR CONTINUING EDUCATION

Many health care organizations allocate a substantial portion of their budget to staff development. Human resource managers often hire consultants and purchase training modules to present in-house programs that are relevant to all levels of the management team.

Other leading providers of continuing education for health services administrators are the professional associations. AHA and its subsections sponsor conferences throughout the country at different times of the year. ACHA regularly holds seminars and forums on strategic management and other timely issues for health administrators; they are open to members and non-members. ACHA's annual Congress on Health Care in Chicago draws a national body of administrators together for four days of intensive classroom training in specific areas of interest. ACHA requires its members to participate in continuing education in order to maintain membership. In conjunction with its annual conference, APHA provides continuing education institutes and sessions on topics such as basic financial management in health care, research utilization, grants writing, and utilization of pharmacist's services, offering continuing education units to those who participate. Many administrators also take advantage of the American Management Association's programs for managers in the public sector.

HAP's educational division is an active provider of regional professional development programming in areas such as cost report preparation and reimbursement, accreditation for laboratory services, and medical staff credentialing and privileges. Another regional provider is the National Health Care Management Center of the University of Pennsylvania, established in 1976 by the Department of Health and

Human Services to improve the quality, quantity, and relevance of health services research in the United States. The leading commercial provider of continuing education for health services administrators is the Aspen Systems Corporation in Maryland. This organization offers seminars in different geographic areas on topics such as "cost containment through materiel management."

The University of Pennsylvania, University of Pittsburgh, and Penn State are among the eastern academic institutions offering continuing education for health services administrators. Harvard University and Cornell University also hold intensive management development short-courses for health care personnel.

Training in specialized areas of public health administration also is available from regional training institutes funded by the Department of Health and Human Services. Training III, an institute sponsored by the Family Planning Council of Southeastern Pennsylvania and located in Philadelphia, is one example. The National Center for Health Statistics in Washington, D.C. trains health administrators and planners in the use of statistics in health care and planning.

There is a smorgasbord of professional development opportunities open to health services administrators. However, the diversity of content areas is not matched by a diversity of delivery modes. Upper level administrators may not always have the time to travel great distances for conferences. The repackaging of existing instruction into videocassette, interactive television, or correspondence form could make it more convenient for them. Two major purposes of continuing education in health services administration are to keep abreast of the latest developments in the field and to move from a clinical to a managerial role. Suggested topics include labor-management relations, government regulations, understanding health care computer systems, fundraising, marketing, risk management and cost containment, supervising exempt employees, and new technology in health care.

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INSURANCE
AGENTS AND BROKERS

Insurance agents and brokers must be licensed by the Pennsylvania Insurance Department to sell insurance in Pennsylvania.

LICENSING INFORMATION

To be licensed as an agent, an individual must:

I. Pass the examination(s) for the line(s) of insurance he/she wishes to handle.

A. Examinations may be taken in any or all of the following areas:

1. Life.
2. Accident and health.
3. Fire and allied lines.
4. Casualty and allied lines.

B. The examination fees are set by the Department.

II. Have the sponsoring insurance company submit a New Agent Application and the individual's examination scores to the Pennsylvania Insurance Department. No fees accompany this application; the insurance company is billed for all fees.

To be licensed as a broker, an individual must:

I. Meet ONE of the following sets of requirements:

A. Have been continuously licensed in Pennsylvania as a fire and casualty agent for at least two years immediately preceding application, or

B. Have been continuously licensed in Pennsylvania as a fire and casualty agent for at least one year immediately preceding application and have successfully completed an educational course approved by the Pennsylvania Insurance Department, or

C. Have been continuously licensed as a broker in another state for two of the three years immediately preceding application, or

D. Hold the Chartered Property Casualty Underwriter (CPCU) or Chartered Life Underwriter (CLU) designation.

II. Pass both of the examinations given; a broker's license is not issued for limited authority. A CPCU or CLU may waive these examinations.

A. The two examinations given are:

1. Fire, casualty, and allied lines.
2. Life, accident, and health.

B. The examination fees are set by the Department.

III. Complete an application for licensing as a broker, including endorsement by two other agents.

RELICENSING INFORMATION

To be relicensed, an agent's insurance company must pay a fee for him/her every two years. Licenses expire as follows:

I. Life, accident, and health—March 31, odd-numbered years.

II. Fire and allied lines—September 30, even-numbered years.

III. Casualty and allied lines--December 31, odd-numbered years.

To be relicensed, a broker must biennially pay one fee if he is licensed as an individual broker, another fee if licensed in a partnership or corporation. All brokers' licenses expire May 31, odd-numbered years.

Continuing education requirements: none.

BACKGROUND INFORMATION

The insurance agent and broker examinations are all given and scored by Educational Testing Service. They are given at eight locations in Pennsylvania (Allentown, Erie, Harrisburg, Johnstown, Philadelphia, Pittsburgh, Scranton, and Williamsport) on the second and fourth Saturdays of each month, and periodically on Mondays in Harrisburg for those who cannot be tested on Saturdays. A licensed agent must sponsor each applicant for agents examinations. An individual may sell only those lines of insurance for which he/she has passed the examination and been licensed.

The life insurance field is one that may be considered easy to enter, but remaining in it is apparently more difficult; the majority of new agents hired are unable to survive past five years. Because the insurance business is volume-oriented, and volume is in large part a function of the number of agents, some insurance companies may consider easy licensing desirable. Once an individual has been licensed, however, he/she should participate in and receive strong support for further training and education. Some insurance companies are prone to encourage learning, and and will often pay for courses, books, and/or the individual's time.

The insurance profession is frequently bifurcated, with the life and health industry operating often differently than the fire and casualty fields. Many of the life insurance companies encourage voluntary participation in continuing education, and support programs that recognize self-improvement, education, and accomplishments of insurance agents and brokers. Among these programs are CLU, Fellow of Life Management Institute (FLMI), and the Million Dollar Roundtable.

The CLU is sponsored by the American College, a non-resident program located at Bryn Mawr, Pennsylvania and accredited by the North Central Regional Accreditation Association. It is supported by revenues from its programs and sales of course guides, with occasional donations from insurance companies or individuals. To become a CLU, an agent or broker must be twenty-one years of age, have three years of professional insurance experience, and pass a series of ten examinations covering taxes, estate planning, pensions, group insurance, law, economics, finance, and accounting. Preparation for CLU examinations ranges from self study to organized classes offered by insurance companies and universities in metropolitan areas. It generally takes an individual from five to ten years to achieve the CLU designation.

Fire, casualty, and allied lines of insurance are sold according to two distribution systems. Some agencies, especially those specializing in personal insurance, operate according to the agency system used in the life industry. Historically, however, fire, casualty, and allied lines have been characterized by the independent agent, and this type of operation is still dominant in commercial insurance and is seen frequently in personal insurance. An independent agency becomes an asset; the list of customers and other facets of the business belong to the agent or broker (rather than to a company), and can be sold.

The CPCU designation for fire and casualty agents and brokers and management personnel is comparable to the CLU. The requirements, standards, and format for becoming a CPCU parallel those for becoming a CLU.

Insurance agents and brokers tend to specialize in either the life or non-life lines. Some companies that offer all types of insurance expect their personnel to be qualified in all lines, however.

The insurance profession does not have a single professional organization. Different lines and specialties have their own organizations. Pennsylvania is somewhat unique in that it does have a single organization that includes all segments of the profession, the Insurance Federation of Pennsylvania. This is primarily a lobbying and public relations organization, and does not provide educational programs.

Independent agent societies in several states have supported stronger licensing laws, and they have made some gains. There has been talk of requiring college contact courses for licensing.

CLIMATE FOR CONTINUING EDUCATION

There is strong feeling within the Division of Agents and Brokers of the Insurance Department that continuing education is essential for persons working in the insurance profession. They cite the rapidly changing nature of the insurance field, caused by high crime rates, rising costs of living, and changing government regulations, as a major reason for agents and brokers to participate in continuing education programs. Discussions concerning the implementation of mandatory continuing education for relicensure have taken place among insurance agencies, agent associations, industry officials, and members of the commissioner's office. However, at the present time no mechanism exists for maintaining the records necessary to monitor compliance with a mandatory continuing education requirement.

The lack of a continuing education requirement is perceived by some as being responsible, at least in part, for the high turnover rate of insurance professionals cited above. Many insurance companies hire new agents but provide them with little or no training. Hence these individuals do not have the information or the skills necessary to succeed in the profession.

For those agents and brokers who voluntarily participate in continuing education, there are programs available. Some individual insurance companies provide continuing education for their employees, and various professional associations also hold continuing education programs. Penn State has offered a number of programs over the years, and continues to do so.

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INTERIOR DESIGN

There is no legal requirement for licensure or certification of interior designers in Pennsylvania or elsewhere in the country at this time. However, a single, nationally recognized, definitive professional designation is granted by the American Society of Interior Designers (ASID) upon fulfillment of specified requirements that are quite similar in nature to the credentialing requirements for licensure in other professions.

BACKGROUND INFORMATION

ASID offers professional membership and designation to qualified interior designers. It was formed January 1, 1975, by the consolidation of the American Institute of Interior Designers (AID) and the National Society of Interior Designers (NSID). Because of the newness of this consolidation, ASID is still solidifying its programs and standards. There are forty-four chapters of ASID within the United States; two of these are in Pennsylvania, in Pittsburgh and Philadelphia. ASID has over 15,000 members, all of whom met the requirements for the type of membership they hold.

Approximately thirty schools in the United States offer programs accredited by the Foundation for Interior Design Education Research (FIDER). Some of these are design schools, but most are four-year institutions offering a baccalaureate degree. Traditionally interior design programs have been in the land-grant universities, where they were a component of the home economics program. There are no FIDER-accredited programs in Pennsylvania at this time, although several colleges, universities, and art schools offer some interior design courses and/or programs.

For qualification purposes for Professional Membership, Associate Membership, or Student Membership in ASID, a course in interior design at any university, college, or two-or three-year school of interior design will be considered only if the program is accredited by FIDER or is offered in a school accredited by a recognized accrediting body. No form of correspondence instruction will be considered in determining an applicant's qualifications.

Professional Membership may be accorded to an individual who is regularly engaged in the professional practice of interior design and

I. Meets ONE of the following education/experience requirements:

A. Completes a four or five year degree course at the college level with a major in interior design, and has two or more consecutive years of full-time experience in interior design or an approved design-related field, or

B. Completes two full years of academic work at the college level and a two- or three-year interior design course in a school of design, and has two or more consecutive years of full-time experience in interior design or an approved design-related field, or

C. Completes a three-year interior design course, and has three or more consecutive years of full-time experience in interior design or an approved design-related field, or

D. Completes a two-year interior design course, and has four or more consecutive years of full-time experience in the field of interior design or an approved design-related field, or

E. Completes secondary school level education, and eight or more consecutive years of full-time experience in the field of interior design.

II. Passes the Interior Design Qualification Examination. The examination is a combination of objective material, such as the history of interior design, and practical problem solving. The problem solving component involves the preparation of drawings.

III. Pays a filing fee to apply for membership, and an initial admission fee when joining.

Once an individual becomes a Professional Member, he/she retains this membership by payment of annual dues. Only Professional Members are permitted to use the ASID appellation.

Associate Membership is reserved for those design graduates who have completed their academic training and are engaged in fulfilling the mandatory work experience required for Professional Membership. Associate members must apply for Professional Membership within one year after completion of the mandatory work experience. At this time they register for and take the Interior Design Qualification Examination.

Student Membership is granted to students who are enrolled at a college, university, or school of design and are pursuing a major course of study in interior design. This membership continues for a period of ninety days following completion of such a course of study.

While an individual can practice interior design without being a member of ASID, those practicing in the field report that there is increasing pressure to obtain this professional designation. ASID membership is viewed by those in the profession and those hiring interior designers as the universal indicator of professional competency.

CLIMATE FOR CONTINUING EDUCATION

Interior designers themselves express a need for continuing education in a number of areas. The two Pennsylvania ASID chapters schedule speakers for their meetings, but offer no real continuing education programs. In addition to courses in interior design subject matter, courses in business management for interior designers, oral communication, art, and other subjects would be useful.

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LANDSCAPE ARCHITECTURE

The Pennsylvania Landscape Architects' Registration Law is a title act providing for mandatory licensing for use of the term "landscape architect," and mandatory biennial relicensing for same.

LICENSING INFORMATION

To be licensed, an individual must:

I. Be a United States citizen or declare intention to become one.

II. Be twenty-five years of age or older, of good moral character, and not have had application, license, or certificate to practice landscape architecture refused, suspended, or revoked elsewhere in the United States.

III. Meet ONE of the following three sets of requirements:

A. Option 1

1. Have four or more years of experience in landscape architecture work under the supervision of a registered landscape architect or a similarly qualified landscape architect, and

2. Be a graduate of an approved institution or college in either an undergraduate course in landscape architecture of four or more years or a graduate course in landscape architecture of two or more years.

B. Option 2

1. Have seven years of experience in landscape architecture work, four years of which shall have been in teaching and/or graduate study at an approved institution or college and three years of which shall have been active work experience under the supervision of a registered landscape architect or similarly qualified landscape architect, and

2. Be a graduate of an approved institution or college in either an undergraduate course in landscape architecture of four or more years or a graduate course in landscape architecture of two or more years.

C. Option 3

1. Have ten or more years of active experience in landscape architecture work, at least six of which shall have been under the supervision of a registered landscape architect or similarly qualified landscape architect.

IV. Pay an application fee.

V. Pass a five-part, written and graphic national examination.

The board may register and license without examination any applicant who:

I. Is a graduate of an approved institution and has had ten years of active experience, or

II. Has had fifteen years of active experience even though not a graduate of an approved institution.

Licenses issued in other states where the requirements and qualifications are equal to Pennsylvania's standards will be endorsed as being valid in Pennsylvania.

RELICENSING INFORMATION

To maintain licensing, an individual must renew the license biennially by paying a fee.

Continuing education requirements: none.

BACKGROUND INFORMATION

In Pennsylvania students graduating in landscape architecture must work in the discipline for at least four years prior to taking the licensing examination. The facts that only 25 percent of those taking the examination pass it the first time, and many candidates take it several times before passing, indicate that some preparation for the examination may be helpful. However, because landscape architecture is a relatively small discipline, it is difficult to assemble a group of licensure applicants for a preparatory course.

The examination, which has five parts, is a national one. However, each state has the option of including one section of its own design. Frequently this section concerns plant materials, since this information is most likely to vary from state to state.

Penn State graduates forty to forty-five students yearly in its "preprofessional" four-year bachelor of science program in landscape architecture. The accredited five-year program leading to a bachelor of landscape architecture has experienced fluctuating enrollments; four students were graduated in this program in 1978, fourteen in 1979. The University of Pennsylvania, with a graduate program, and Temple University, with a two-year program, are the only other schools in the state offering landscape architecture programs.

The American Society of Landscape Architects, located in Washington, D.C., has approximately 5,000 members. The Pennsylvania-Delaware chapter has 200 to 225 members in five sections: Delaware, Philadelphia, North Central, South Central, and Pittsburgh. Of these, the Pittsburgh section is described as being the most cohesive, regularly meeting group. The annual Pennsylvania-Delaware society meetings attract sixty to eighty members. There are a total of 500 to 600 licensed practitioners in Pennsylvania.

Nationally, the attitude toward licensing of landscape architects varies. Two states, California and New York, have practice acts. Thirty-six other states, including Pennsylvania, have title acts. In Colorado, sunset legislation has eliminated all licensing, so that anyone may use the landscape architect title and practice the profession.

CLIMATE FOR CONTINUING EDUCATION

As noted earlier, the small number of persons annually preparing for the licensing examination in landscape architecture minimizes the feasibility of conducting preparatory classes or workshops. However, examination results appear to indicate a need for some type of review and preparation. A home study package, including slides and cassette tapes, has been suggested as a possible solution, but none has been developed as yet. A teacher's manual and a student's fact book were recently developed for use in a classroom setting, but their effectiveness has yet to be proven, or even tried on any significant scale.

Other than examination preparation, the need for continuing education for landscape architects is not perceived as being great. The bulk of a landscape architect's work is traditional site planning, an area that has experienced few changes in the past several decades. Landscape architects generally feel that they maintain their skills by using them. If they undertake a job that includes some work with which they do not feel comfortable, they usually prefer hiring a consultant to acquiring the knowledge necessary to do the job themselves.

The areas of landscape architecture cited as having developed in recent years are large scale land planning, visual resource management, and historic preservation. Larger landscape architecture firms often hire younger, more recently educated persons to handle these aspects of their work. There might be potential areas for continuing education; in fact, the Philadelphia section did have one such program. Developed by the University of Pennsylvania, it was a ten-week, once-a-week course that attracted about twenty participants. There has been some talk of Penn State's conducting a similar program, and planning is underway to offer a one-day workshop immediately preceeding the 1981 chapter meeting in State College.

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LAW

In Pennsylvania, the State Board of Law Examiners is appointed by the Supreme Court of Pennsylvania to enforce the rules and orders relating to registration and admission to the bar. An individual must be admitted to the bar of the Supreme Court of Pennsylvania to regularly practice law within the Commonwealth.

INFORMATION RELATING TO ADMISSION TO THE BAR

To be admitted to the bar of Pennsylvania, an individual must:

I. Receive an undergraduate degree from an accredited college or university, or complete an education that is equivalent to an undergraduate education in the opinion of the Board.

II. Receive an earned Bachelor of Laws or Juris Doctor degree from an accredited law school. The Board may extend these provisions to accept completion of the study of law in a law school outside the geographical area encompassed by the accreditation activities of the American Bar Association.

III. Have no record of prior conduct which, in the opinion of the Board, indicates character and general non-scholastic qualifications incompatible with the standards expected to be observed by members of the bar of Pennsylvania.

IV. Satisfactorily complete the bar examination administered under the authority of the Board. There is a fee charged to take the examination, which is given each February and July.

V. Provide evidence satisfactory to the Board of ONE of the following:

  A. Bona fide intention of maintaining an office for the practice of law in Pennsylvania, or

  B. Residence in the Commonwealth, or

  C. Completion of study of law at an accredited law school within the Commonwealth.

An individual admitted to the bar of another state may be admitted to the Pennsylvania bar if this admission is in a reciprocal state; the applicant presents a certificate from the highest court of that state indicating good standing at the bar there; the applicant has either practiced law in that state for at least five years, been engaged in teaching of law at one or more accredited schools for at least five years, or engaged in a combination of these two activities for at least five years; and the applicant meets items I, II, and III above.

REGISTRATION INFORMATION

An individual must file a registration statement and pay an annual fee to retain active status to practice law in the Commonwealth of Pennsylvania.

Continuing education requirements: none.

BACKGROUND INFORMATION

The Pennsylvania bar examination has two portions. The multistate examination, which is used by a large number of states, is compiled and graded by ETS, with each state determining its own passing score. It is a day-long, multiple choice examination that is considered to be quite difficult. The second, state portion of the examination is prepared by the Board. It is a day-long essay test.

Once an indivdual is admitted to the bar in Pennsylvania, he/she may practice before any court in the Commonwealth. A lawyer admitted to the bar in one state may handle a case in another state on a non-regular basis. In such cases, an attorney of record generally is present and introduces the visiting attorney to the court.

There is some specialization in the legal profession, but traditionally formal recognition of specialty practice has existed only in the areas of patent, copyright, and admiralty law. However, some states have recently adopted procedures for certification of a number of specialties, and legal specialization is viewed as a growing trend. Specialty certification, where it exists, is not a condition for the practice of that specialty, but rather serves as a professional designation. Pennsylvania has no specialty certification at this time.

The Pennsylvania Bar Association is the state professional society for lawyers, with local associations in each county of the Commonwealth. These associations are private entities, but sometimes function in a quasi-public manner. They are often consulted in practical decisions, and their operation is intertwined with the state judiciary system. A substantial majority of lawyers belong to the county associations, and most belong to the state association also. Membership in a county association may reduce the cost of membership in the state association. Some county groups collect state dues with local dues, and thus their members automatically become members of the state organization.

The state and county associations are unrelated to the national American Bar Association (ABA). This lack of a direct relationship between the state and national organizations is due in part to the state and local orientation of law practice. This orientation is changing somewhat, however, as some national law firms are being formed. The Pennsylvania Bar Association does send delegates to ABA.

ABA accredits law schools throughout the country. Regional accrediting groups exist in some parts of the country, and their accreditation may be acceptable for admission to the bar in the states that they serve. The American Association of Law Schools certifies programs, concerning itself with academic content.

In addition to lawyers, the area of law also includes paralegals and legal administrators. Paralegals represent a fairly new occupational area, and as such are unregulated. A paralegal may do most of the things that a lawyer does, including meeting with clients, doing background research, and putting documents together. Paralegals may not go into court, however, and they assume less responsibility for legal work than do lawyers. In some cases an individual functioning primarily as a legal secretary may be referred to as a paralegal. There is a broad spectrum of training available for individuals wishing to become paralegals, ranging from a four-year program to a program having only a few courses. Paralegals are most frequently hired in larger law firms.

Legal administrators may be lawyers who have moved into management, or they may be persons with no legal background who are hired to handle administrative details. There is no regulation of legal administrators. Private legal administrators are often employed by law firms, while public legal administrators are found in courts.

CLIMATE FOR CONTINUING EDUCATION

Mandatory continuing education for lawyers already exists in several other states, and it is likely to become a requirement for registration in Pennsylvania in the future. Increased complexity of the law and a growing tendency toward legal specialization have heightened the need for continuing legal education. Both state and local bar associations provide continuing education for lawyers in Pennsylvania. While Penn State does offer some courses and programs, such as those on land use and zoning, that are of interest to lawyers, without a law school the University cannot easily provide basic continuing legal education.

Continuing education for paralegals is also needed, and Penn State has a program for them. This program is viewed as a help to legal secretaries who might wish to assume some additional responsibilities in a law office. Other courses could be added to provide more comprehensive paralegal training, however.

Legal administrators might well benefit from some continuing education in the management area.

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LIBRARY SCIENCE

In Pennsylvania, public librarians are certified under the auspices of the State Librarian to implement his/her responsibility to counsel local libraries on minimum standards and to facilitate recognition of qualified persons by the local library boards of the Commonwealth. There are no certification or licensing requirements for academic or special librarians.

Elementary and secondary school librarians are certified by the Department of Education's Division of Teacher Certification as discussed in the "Education" section of this report.

CERTIFICATION INFORMATION

An individual may apply for certification for the following public library positions: professional librarian, provisional librarian, or library assistant. Only the head librarian in each public library is required to be certified. To be certified, an individual must:

I. Make application in accordance with the State Library standards.

II. Pass an examination.

III. Meet the requirements of the designation desired, as described below.

   A. To receive a certificate of professional librarian, an applicant must meet ONE of the following requirements:

      1. Have a baccalaureate degree from an approved or accredited four-year college or university and a fifth-year degree in library science from a school approved by the appropriate Commonwealth agency or accredited by the American Library Association, or

      2. As of June 14, 1961, have been employed as head librarian in a Commonwealth public library serving an area of more than 20,000 persons, or in a position classified as requiring a professional librarian.

   B. To receive a certificate of provisional librarian, an applicant must meet ONE of the following requirements:

      1. Have a baccalaureate degree from an approved or accredited four-year college or university and have completed twelve credit hours of library service courses at institutions approved by the appropriate Commonwealth agency or accredited by the American Library Association, or

      2. As of June 14, 1961, have been employed as head librarian in a Commonwealth public library serving an area of 10,000

to 19,999 persons, or in a position classified as requiring a provisional librarian.

C. To receive a certificate of library assistant, an applicant must meet ONE of the following requirements:

1. Have completed two academic years of college education in an approved or accredited institution and have completed nine credit hours of library service courses at institutions approved by the appropriate Commonwealth agency or accredited by the American Library Association, or
2. Have completed two academic years of college education in an approved or accredited institution and have completed one year of in-service training in library work approved by the State Librarian, or
3. As of June 14, 1961, have been employed as head librarian in a Commonwealth public library serving an area of 9,999 persons or less, or in a position classified as requiring a library assistant.

There are no certification fees.

There is no certification by reciprocity of librarians in Pennsylvania. This type of arrangement was investigated and tried, but found to be unsatisfactory due to lack of cooperation from other states.

RECERTIFICATION INFORMATION

There is no recertification of public librarians in Pennsylvania at this time.

Continuing education requirements: none.

BACKGROUND INFORMATION

As noted above, public and school librarians are the only library science professionals required to be certified to practice in Pennsylvania, and there is no recertification. However, there has been a move in other states to recertify public librarians, and this question is being considered in Pennsylvania.

A Master of Library Science degree is commonly required of librarians in academic positions, and often this requirement stipulates that the degree be granted by a school accredited by the American Library Association (ALA). Three schools in Pennsylvania (Clarion State College, Drexel University, and University of Pittsburgh) and approximately seventy in the country have ALA-accredited programs.

Although the MLS is commonly required for librarians in academic institutions, at those institutions where librarians hold faculty status the requirements for promotion and tenure often result in academic librarians pursuing advanced degrees at both master's and doctoral levels, and often in disciplines other than library science. In addition, engaging in appropriate nondegree credit and noncredit programs is considered highly desirable in gaining promotion and tenure. User instruction programs concentrating on teaching methodology and user instruction program development are areas where academic librarians (and public librarians, too) find an insufficient number of relevant programs available as continuing education activities.

Special librarians working in business and industry are not subject to either certification or any uniformly applied educational standards. Often an employer in these areas will overlook the absence of library degree and seek a person with subject area expertise and some library experience.

The Medical Library Association has a professional certification program for medical librarians. This is a form of recognition, but carries no legal implications.

In addition to the schools offering ALA-accredited programs, there are a number of schools with programs in school librarianship on the baccalaureate level. However, individuals seeking a Master of Library Science degree usually have a bachelor's degree in a subject area rather than in the library field.

In recent years the field of library science has experienced a fairly tight job market. This restricted market, combined with increasing numbers of library school graduates, has led some people in the profession to suggest that library schools be more selective in their admissions policies.

CLIMATE FOR CONTINUING EDUCATION

Although continuing education is not mandatory for librarians, library personnel are interested in continuing education and participate in it on a voluntary basis. As an outgrowth of this interest the State Library, in cooperation with the Pennsylvania Library Association, has developed a plan for coordination of continuing education for librarians and has hired a coordinator to work on the project.

While there is a need for coordination of continuing education, there does not appear to be a strong need for the development of additional continuing education programs in library science per se. Institutions of higher education and the professional library organizations provide the continuing education offerings necessary to meet most of the librarians' needs. Technological changes, principally in computer use, require fresh consideration of the ways in which libraries organize and provide services, while new studies of the process of information transfer suggest related fields for continuing education.

It was suggested that Penn State could augment the programs already offered, which are primarily in library science, with some continuing education programs addressing information theory, use of computer technology, management and communication skills, planning, teaching skills for librarians, user instruction program planning, and the learning process.

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MARKETING

There is no mandatory licensure or certification for persons in marketing in Pennsylvania. However, two fields within marketing offer voluntary certification programs. The Public Relations Society of America, Inc. (PRSA) sponsors such a program for public relations personnel. The Business-Professional Advertising Association (B/PAA) provides a certification program for persons engaged in business-to-business advertising.

CERTIFICATION INFORMATION

PRSA uses the term "accreditation" synonymously with certification. In order to be accredited, an individual must:

I. Have five years of experience in the public relations field.

II. Successfully complete an accreditation examination.

III. Pay a membership and an accreditation fee.

In order to become a Certified Business Communicator (CBC) through B/PAA, an individual must:

I. Have a combined total of eight years of experience in business/professional marketing communications. A maximum of four years of college education may be substituted for up to four years of work experience.

II. Successfully complete a certification examination.

III. Pay a certification fee.

RECERTIFICATION INFORMATION

PRSA has no provisions for recertification currently.

Continuing education requirements: none.

B/PAA provides for recertification every five years. In order to be recertified, an individual must:

I. Maintain continuous membership in B/PAA for five years, or

II. Demonstrate continued self-education and professional development, or

III. Successfully complete a re-examination.

BACKGROUND INFORMATION

Marketing is a very broad and complex field with the basic goal of enhancing the consumer's perception and utilization of products or services. A consumer may be an individual or group of persons, such as an agency, business, or other organization. Marketing comprises many specialty areas, and persons within specialties may work in a variety of settings, but all aspects of marketing relate to the same basic goal.

The major components of marketing include marketing research, marketing management, advertising, sales, sales management, public relations, retailing, product management, and marketing planning. While many positions are in businesses and industries, other groups such as government agencies, non-profit organizations, professional associations, and institutions also employ persons in marketing. Within each specialty area, jobs are varied; for example, public relations encompasses writing, speaking, research and evaluation, production, and event management. There are many interrelationships among marketing personnel and agencies. For instance, the marketing research division of a company may hire a marketing research consulting firm to conduct a survey, and the advertising department of the same company may contract another agency to develop its advertising campaign.

Because of the diversity within marketing, employment qualifications vary widely. Although a college degree is required for many entry level jobs, this is not a universal prerequisite. Prospective advertising professionals might submit a portfolio to potential employers in lieu of, or in addition to, a college diploma, and many sales personnel at the retail level begin their careers without college preparation. However, sales representatives in many fields must have an undergraduate degree; computer salespersons, for example, must have a solid knowledge of computer operations. Perhaps marketing research demands the highest level of academic preparation, for persons in this field generally have at least a master's degree. Employers frequently desire sales experience in addition to academic qualifications. Even individuals with M.B.A. degrees may spend a year or so gaining sales experience before entering marketing positions.

Many colleges and universities offer specialized coursework in advertising, public relations, or marketing. Advertising is often affiliated with journalism programs, while marketing and sales management and research courses tend to be associated with colleges of business. Penn State offers an advertising major within the School of Journalism, and a wide range of marketing and sales courses through the Marketing Department within the College of Business Administration. Experienced marketing professionals stress the importance of practical applied knowledge, for without it academic degrees are meaningless.

The only areas which offer certification programs are public relations and business-to-business communications. To date, there are fewer than 3,000 persons accredited by PRSA, and only about 800 CBCs, so the acceptance of certification is limited. In fact, because marketing is a competitive field in which individuals or agencies are judged by results rather than academic credentials, many professionals within the field see little value in certification. A possible exception to this might be the field of marketing research, which is considered a more rigorous and scientific discipline than other marketing specialties.

A number of professional organizations serve personnel in the marketing professions. PRSA, the largest association for public relations personnel, is dedicated to increasing professionalism within the field. It has local and college chapters; Philadelphia and Pittsburgh each have affiliated organizations. Two large marketing organizations include Sales and Marketing Executives International (SMEI) and the American Marketing Association. Each have several local chapters in Pennsylvania, primarily in the eastern part of the state. The American Advertising Federation represents advertising professionals, and has over 200 advertising clubs located in major cities, as well as college chapters. Other organizations include B/PAA, American Association of Advertising Agencies, Association of National Advertisers, the Direct Mail/Marketing Association, The Advertising Council, Inc., and the Association of Industrial Advertisers. The American Management Association (AMA) covers a variety of management personnel, including those in marketing and sales fields.

CLIMATE FOR CONTINUING EDUCATION

Many continuing education opportunities exist for marketing professionals, with the major providers being professional associations, commercial enterprises, businesses, and institutions. AMA offers the widest range of workshops, holding about forty seminars in the area of advertising/sales promotion, public relations management, product and brand management, marketing management, customer service, marketing research and forecasting, and selling and sales management. SMEI offers three seminars on sales and sales management, and the American Marketing Association has conferences geared to marketing research personnel. Within the advertising field, few national associations offer many programs, although some continuing education may be conducted through local chapters. The Direct Mail/Marketing Association is more highly involved in continuing education. PRSA also offers over twenty seminars that cover many aspects of public relations.

The Wharton School of Business, Drexel University, and the University of Pittsburgh are among the institutional providers of continuing education. Penn State also offers workshops and sponsors executive education programs. For example, an Industrial Marketing Management Program will be held at University Park in October, 1981. Westinghouse Corporation is one example of an in-house continuing education sponsor: its catalogue of course offerings approaches Penn State's in size.

Employers are generally supportive of continuing education for their staff members if they feel a program is conducted well and has practical applications. Exposure to new ideas is critical for professionals working in the creative side of marketing, since running dry of ideas can be a great fear. Workshops which introduce the participants to even one good idea are considered to be worthwhile.

Because the marketing field is so broad, continuing education programming must be directed towards areas of specialization, or appeal to a functional area which relates to a number of specialties. Some special needs might include sales training, management strategies, internal communications, and interpersonal skills. A case study approach may work well in some continuing education settings. Although continuing education opportunities abound, marketing programs aimed at non-business people or small business operators might be successful.

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MEDICAL RECORDS
ADMINISTRATORS AND TECHNICIANS

There is no mandatory licensure or certification for medical record administrators or technicians in Pennsylvania. However, voluntary registration is provided through the American Medical Record Association (AMRA).

REGISTRATION INFORMATION

In order to become a Registered Record Administrator (RRA), an individual must:

I. Complete:

A. An accredited baccalaureate degree program in medical record administration, or

B. An accredited one-year postgraduate certification program in medical record administration, and hold a college degree.

II. Successfully complete the AMRA national registration examination for RRAs.

III. Pay a registration fee.

In order to become an Accredited Record Technician (ART), an individual must:

I. Complete:

A. An accredited academic program for medical record technicians, or

B. AMRA's Independent Study Program in Medical Record Technology, and have thirty semester hours of AMRA-approved college credit.

II. Successfully complete the AMRA national registration examination for ARTs.

III. Pay an accreditation fee.

RE-REGISTRATION INFORMATION

In order to remain currently registered as an RRA, an individual must:

I. Complete thirty hours of continuing education every two years.

II. Pay a re-registration fee.

In order to remain currently registered as an ART, an individual must:

I. Complete twenty hours of continuing education every two years.

II. Pay a re-registration fee.

BACKGROUND INFORMATION

Medical record administrators and technicians work in the field of medical information systems. Their responsibilities are more supervisory and administrative than those of medical record personnel in clerical positions such as transcriptionists, file clerks, chart analyzers and re-analyzers, and coders. All hospitals and an increasing number of other health care facilities such as college health centers have medical record departments to maintain a record of each patient's diagnoses and treatments. Information contained in the medical record may be used for purposes beyond patient care, such as preparing reports or special studies or responding to authorized inquiries by insurance or legal personnel.

Any medical institution accredited by the Joint Commission on the Accreditation of Hospitals (JCAH) must employ an ART or RRA on a full time or consultant basis to oversee the administration of the medical record department. Health care facilities that are not accredited by JCAH do not have this requirement, but some employ RRAs or ARTs nevertheless.

A medical record administrator at the RRA level generally supervises other department staff members and is responsible for designing and implementing health information and medical record management systems. An ART also may function as the medical record department administrator, or may be employed as a technician under an RRA's supervision. Because an ART's level of training is lower than that of an RRA, the ART even at the administrative level may assume fewer management and budgetary responsibilities than an RRA, depending on the institution's overall administrative organization. An ART working as a technician for an administrator may act as the tumor registry clerk or may administer designated areas within the medical record department. The responsibilities RRAs and ARTs assume very widely among different kinds and sizes of health care facilities.

Modern technology has made it possible to retain and retrieve medical records efficiently through the use of computers, microfilm, and microfiche. Word processing equipment aids in record transcription. However, many smaller facilities are just beginning to develop computer and word processing capabilities. The administrator is also responsible for analyzing data generated by the management system. Because of the nature of the job, the medical record administrator is in daily contact with the medical staff and administration. Increasingly an administrator is involved with non-hospital personnel and may have to respond to court subpoenas, for instance. Another crucial aspect of an administrator's work is maintaining the confidentiality of records.

ARTs and RRAs have similar initial academic preparation, including coursework in anatomy, physiology, medical terminology, and medical record science, and supervised practical experience. However, while ART-level (technician) programs are two years long and lead to an associate degree, RRA-level (administrator) programs provide additional specialized coursework and lead to a baccalaureate degree. There are also one-year postgraduate certificate programs in medical record administration. AMRA offers an independent study course in medical record technology which, combined with thirty hours of approved college credits, qualifies an individual to sit for the ART examination. AMRA and the Committee on Allied Health Education and Accreditation of the American Medical Association accredit each type of program. In Pennsylvania, York College and Temple University offer accredited four-year programs in medical record administration and Gwynedd-Mercy College, Community College of Philadelphia, and Community College of Allegheny County have accredited programs in medical record technology.

AMRA is the national professional association serving medical record administrators and technicians. Founded in 1928, it now has over 23,000 members and is interested primarily in ensuring the professionalism of the field and promoting quality education for prospective administrators or technicians. RRAs and ARTs are eligible for active membership, other interested persons may become associate members, and student membership is available to full time students in approved medical record programs. The state affiliate is the Pennsylvania Medical Record Association (PMRA).

Although certification is voluntary, unless the medical record department administrator is working in an health care facility not accredited by JCAH or is supervised by a consulting RRA or ART, that individual must be registered in order to meet JCAH accreditation standards. There are currently 418 RRAs and 685 ARTs in Pennsylvania.

CLIMATE FOR CONTINUING EDUCATION

AMRA believes strongly in the value of continuing education, as evidenced by their re-registration requirements for RRAs and ARTs. The association approves continuing education programs sponsored by other organizations and assigns hours of credit per program. Approved continuing education activities include educational portions of association meetings, a variety of specified individual study formats, and relevant coursework, as well as seminars and workshops.

AMRA maintains an extensive lending library and provides a limited amount of continuing education through workshops and conferences. One program this year focuses on quality assurance and risk management. The Hospital Association of Pennsylvania in conjunction with JCAH has sponsored seminars on this topic also. PMRA and regional or local chapters provide substantial programming, as do hospitals through their own in-service meetings. Educational institutions are other sources of continuing education. For example, Penn State has offered a workshop focusing on the legal aspects of medical records.

Medical record professionals face several challenges in the 1980s which continuing education might help them meet. The international system for coding diseases changes approximately every ten years, and AMRA or PMRA often update personnel on these changes. Administrators must handle increased requests for information from non-hospital personnel while still maintaining necessary record confidentiality. The information and technology explosion poses another challenge to modernize and streamline management systems. Many smaller health care facilities are beginning to make plans to computerize their record department and personnel must be trained to understand and work with new computer systems. Some administrators feel that refresher courses in the basic sciences would be useful. Medical record administrators and technicians must remain aware of innovative approaches to managing medical information, and continuing education can address this need.

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MEDICAL TECHNOLOGY

There is no licensing of medical technologists in Pennsylvania. However, certification that exists on a voluntary basis through four national registries is regarded as a criterion for employment.

CERTIFICATION INFORMATION

There are four national registries for medical technologists. The four agencies and their requirements for certification and registration are:

I. American Society of Clinical Pathologists (ASCP)

To be certified, an individual must meet the following requirements:

A. Have a baccalaureate degree from an accredited college or university including specific credit hours in the sciences and mathematics.

B. Meet ONE of the following options:

1. Complete a twelve month accredited medical technology program, or

2. Be certified as a medical laboratory technician, and have three years of laboratory experience, or

3. Be certified as a laboratory assistant, and have four years of laboratory experience, or

4. Have five years of laboratory experience as specified by ASCP.

C. Pass the ASCP certification examination.

D. Pay a fee.

II. American Medical Technologists (AMT)

To be certified, an individual must meet the following requirements:

A. Meet ONE of the following options:

1. Hold a baccalaureate degree in medical technology with a major in one of the biological sciences from an accredited college or university, and have one year of approved laboratory experience, or

2. Complete ninety semester hours in an accredited

college including specific credit hours in the sciences and mathematics, and have one year of approved laboratory experience, or

3. Be registered as a medical technician, and have three years of approved laboratory experience.

4. Pass the HEW Proficiency Examination.

B. Pass the AMT certification examination.

C. Pay a fee.

III. National Certification Agency for Medical Laboratory Personnel (NCAMLP)

To be certified, an individual must meet the following requirements:

A. Meet ONE of the following options:

1. Hold a baccalaureate degree from a clinical laboratory science program at an accredited college or university, or

2. Hold a baccalaureate degree which includes thirty-six semester hours in the biological and physical sciences, and complete a clinical laboratory program recognized by a government agency, or

3. Hold a baccalaureate degree which includes thirty-six semester hours in the biological and physical sciences, and have two years of approved laboratory experience, or

4. Complete sixty hours of college work including thirty-six semester hours in the biological and physical sciences, and have ten years of approved laboratory experience.

B. Pass the NCAMLP certification examination.

C. Pay a fee.

IV. International Society for Clinical Laboratory Technology (ISCLT).

To be certified, an individual must meet the following requirements:

A. Meet ONE of the following options:

1. Hold a baccalaureate degree from an accredited college or university with a major in a biological or physical

science, and have one year of approved laboratory experience, or

2. Be a registered laboratory technician with five years of approved experience and meet continuing education requirements, or

3. Pass the HEW Proficiency Exam.

B. Pass the ISCLT certification examination. Those individuals who pass the HEW Proficiency Examination are not required to sit for the ISCLT examination.

C. Pay a fee.

RECERTIFICATION INFORMATION

In order to maintain certification by ASCP, AMT, or ISCLT, an individual must pay an annual fee. There are no continuing education requirements.

NCAMLP registration is valid for four years. Re-registration requirements have not been developed.

BACKGROUND INFORMATION

Licensing of medical technologists exists in some states, and there has been talk of licensing in Pennsylvania, but no action has evolved. Proponents of licensing suggest that there is a need for legal definition of medical technologists, and that a law supported by medical technologists would place the responsibility for the practitioner's competence on the licensing board and the practitioner rather than on the laboratory supervisor or director. However, the profession's lack of common certification and subsequent lack of unification weakens the power of medical technologists to push for licensure.

Where licensing does not exist, an individual may fill a medical technologist position without meeting any mandatory requirements other than those set by his or her employer. Many hospitals and clinical laboratories do require certification for employment. In hospitals participating in the Medicare Program, evidence that employees meet certain standards of competency must be given for the hospital to be reimbursed for Medicare services. Those medical technologists who are neither certified nor have formal education in medical technology but have had years of experience and training in a medical laboratory may apply for the HEW Proficiency Examination for Medicare/Medicaid Reimbursement of Institutions. This examination was developed to be used as a measure of competency of those individuals working as medical technologists without formal education in the field. Primarily, this was developed to aid people trained in the military service and was an outgrowth of the Medicare legislation as a means to meet employee competency requirements.

Standards of achievement and function in medical technology have not been nationally formalized or coordinated by any government agency. An individual chooses the registry by which he wants to be certified, and maintains his registration there.

Each registry has several functions, including the design and administration of its own certification examination and the maintenance of a registry of those individuals certified by the agency. Each registry provides a list of medical technologists who have met certain standards of career entry-level competency generally recognized by practitioners in the field.

There is a current practice for some employers to require certification by a specific registry. This practice is considered discriminatory by medical technologists.

Categorical certification exists in the field of medical technology. These categories include cytotechnology, technologist in chemistry, hematology, microbiology, and nuclear medicine. Category certification is provided by the American Society of Clinical Pathologists and independent certifying agencies in each category. Specialist certification exists for post-baccalaureate study.

The HEW Proficiency Examination for medical technologists is not a means of certification but is required of medical technologists desiring to work in independent laboratories which provide Medicare services. Medical technologists working in hospitals are increasingly taking the HEW examination as employers are requiring it for employment.

To qualify for the HEW Proficiency Examination an individual must be a high school graduate and have four years of any combination of laboratory experience, training, and/or education in medical technology. There is no fee. The examination is given through the State Public Health Department on an annual basis. There are four sections which must be passed in one sitting. An individual may retake the examination as many times as needed. This year 1,135 people sat for the examination in Pennsylvania. The examination is considered fairly difficult, with a passing rate of 50 to 60 percent.

CLIMATE FOR CONTINUING EDUCATION

Continuing education is "pushed to the hilt" by the state and national societies. The Pennsylvania Society for Medical Technology, the state chapter of the Society for Medical Technology, sponsors workshops in the spring and winter, and the local chapters offer ongoing programs. The national conventions have workshops a full week ahead of their annual program, and semi-annual workshops are offered by ASMT.

Other than continuing education for updating purposes, there are many refresher or preparatory courses offered through the educational services of the national certifying agencies. Several community colleges around the Philadelphia area, as well as the certifying agencies, offer refresher courses for the HEW Proficiency Examination. These appear to be quite popular since individuals see this as being a less expensive alternative to taking a college course.

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MEDICINE
DOCTOR OF OSTEOPATHIC MEDICINE

The State Board of Osteopathic Medical Examiners licenses physicians to practice osteopathic medicine and surgery. It is unlawful for any person to practice osteopathic medicine or assume the title of Doctor of Osteopathic Medicine and Surgery (D.O.) in Pennsylvania unless he/she is licensed by this Board.

LICENSING INFORMATION

In addition to an unrestricted license for the practice of osteopathic medicine and surgery, the Board may grant a temporary license for a graduate of an osteopathic medical college for twelve months. This license confers the right to participate in approved graduate osteopathic or medical training within the complex of the hospital to which he is assigned.

To obtain a license without restriction, an individual must:

I. File a completed application attesting to the fact that he/she is of good moral character and not addicted to habit-forming drugs.

II. Be a graduate of an osteopathic medical college that is accredited by the American Osteopathic Association (AOA).

III. Complete an AOA or AMA approved one-year internship or first year residency.

IV. Pay a fee for licensure by examination or by endorsement.

V. Pass both a written and practical examination for licensure by examination only.

VI. Pay a registration fee and obtain and show proof of compliance with Medical Malpractice Insurance Act III.

Licensure by endorsement may be given by the Board if an individual meets all requirements as stated above, submits certification of current licensure in another state with equal licensure requirements, and passes a practical Osteopathic Manipulative Therapy examination and a personal interview.

RELICENSING INFORMATION

To remain licensed, an individual must register biennially, by paying a fee, showing continued proof of compliance with Medical Malpractice Insurance Act III, and reporting any multiple state licensure and any disciplinary action reported against any other state licensure.

In order to practice osteopathic medicine in Pennsylvania a physician must carry malpractice insurance. Malpractice insurance companies are required to show evidence of risk management programs, under regulations of the State Insurance Department. An acceptable form of risk management for a D.O. is to participate in 150 credit hours of continuing medical education (CME) per three year period. Because of this requirement, although continuing education is not a legal requirement for relicensure, it is a practical requirement for all D.O.s.

BACKGROUND INFORMATION

The requirements for practice of osteopathic medicine are quite similar to those for allopathic medicine, with the exception that legislation regulating osteopaths includes provisions for osteopathic manipulation therapy. D.O.s and M.D.s otherwise perform the same or very similar functions.

The AOA is the national professional organization for D.O.s, and the Pennsylvania Osteopathic Medical Association is the state chapter. To qualify for membership in either of these organizations, a D.O. must meet the CME requirement described above. The AOA maintains records of members' CME participation. AOA-approved hospitals strongly urge membership in state and local societies if physicians wish to participate and have staff privileges.

There are an estimated 2,000 D.O.s practicing in the Commonwealth. Pennsylvania has only one osteopathic college, the Philadelphia College of Osteopathic Medicine. Seventeen hospitals in the state have AOA approval.

A D.O. may apply for training and certification in special departments of osteopathic medicine. D.O.s must be registered by the State Board of Osteopathic Medical Examiners while they are participating in a specialty training program, which may be in either an osteopathic or an allopathic hospital. A D.O. need not be licensed during the first and second years of specialty training, but must be a licensed physician upon entering the third year. D.O.s are certified in their specialty area by the AMA or the AOA, but not by the state. Both the AMA and the AOA have specialty certifying boards that give examinations and see that other qualifications for specialization are met. Some of the specialty areas have CME requirements for continued certification in excess of those required for AOA membership.

CLIMATE FOR CONTINUING EDUCATION

Although CME is not a legal requirement for the practice of osteopathic medicine, in practice CME participation is almost essential. CME programs offered by the AMA are often AOA-approved also. However, CME Category 1-A, which includes formal educational programs, stipulates that at least half of the faculty of such programs must be osteopathic physicians or members of osteopathic college faculties or staffs, or staff members of AOA-approved teaching hospitals. Thus it is difficult for any but an osteopathic institution to offer Category I formal CME programs for D.O.s. AMA-approved programs can be used by D.O.s to meet requirements beyond the sixty Category I credit hours, however.

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MEDICINE
MEDICAL DOCTORS

The State Board of Medical Education and Licensure, under the Medical Practice Act of 1974, licenses physicians to practice medicine and surgery in the Commonwealth of Pennsylvania. It is unlawful for any person to practice medicine or assume the title of Doctor of Medicine (M.D.) in Pennsylvania unless he/she is licensed by this Board.

LICENSING INFORMATION

To obtain a license without restriction, an individual must:

I. Be of legal age, good moral character, and not addicted to the intemperate use of alcohol or the habitual use of narcotics or other habit-forming drugs.

II. Be a graduate of an accredited medical college. If a graduate of a foreign medical school (except those in Canada), the licensure applicant must also present evidence of certification by the Educational Council for Foreign Medical Graduates, and complete one year of approved graduate medical education.

III. Attach an affidavit or affirmation of the applicant as to the verity of the application.

IV. Pay a fee.

V. Pass an examination.

Licensing by reciprocity may be established at the discretion of the Board. However, no blanket reciprocal agreements or endorsements (except for Canada) are covered in the Medical Practice Act. The Board will consider endorsing physicians from other states with equivalent standards on a case-by-case basis.

In addition to an unrestricted license for the practice of medicine and surgery the Board may grant a temporary license for a graduate medical trainee in the first year of training which is valid for twelve consecutive months and confers the right to participate in approved graduate medical training; a limited license, granted to a graduate of a foreign medical school, for the purposes of teaching and/or practicing medicine and surgery in a medical college; or a graduate certificate for a physician training in a specialty.

RELICENSING INFORMATION

To remain licensed, an individual must register biennially, paying a fee.

In order to practice medicine in Pennsylvania, a physician must carry malpractice insurance. Malpractice insurance companies are required to show evidence of risk management programs, under regulation of the State Insurance Department. An acceptable form of risk management is for an M.D. to participate in 150 credit hours of continuing medical education (CME) per three year period, with a minimum of sixty of these hours being obtained under Category I. Because of this requirement, although continuing education is not a legal reqirement for relicensure, it is a practical requirement for all M.D.s.

BACKGROUND INFORMATION

The American Medical Association (AMA) is the national professional association for M.D.s. The Pennsylvania Medical Society (PMS), with approximately 16,000 members, is the state organization. To qualify for membership in PMS, or to obtain the AMA's Physician's Recognition Award (PRA), a physician must meet the CME requirements described above.

An M.D. may specialize in a particular field of medicine. Specialty certification is granted by independent specialty boards which establish requirements and give examinations for certification. Board certification is a professional designation that is unrelated to an M.D.'s license to practice. Specialty societies may specify the type and amount of CME required for membership, but at this time only the American Academy of Family Practice has requirements that differ to any degree from those for AMA's PRA.

CLIMATE FOR CONTINUING EDUCATION

Although CME is not a legal requirement for the practice of medicine in Pennsylvania, in practice CME is almost essential.

Some CME is offered by PMS, but most of the CME in Pennsylvania is provided by community hospitals and medical schools. The AMA and PMS offer approval for CME activities.

The CME requirements established by the AMA, and used for PMS membership and PRA qualification, include 150 credit hours every three years, distributed among the various categories as follows:

Category		Credit Hour Limit
I	CME activities with accredited sponsorship (60 hours minimum)	no limit
II	CME activities with non-accredited sponsorship	45
III	Medical teaching	45
IV	Papers, publications, books, exhibits	40
V	Non-supervised CME individual CME activities	45
	5(a): Self instruction (22 credit hours)	
	5(b): Consultation (22 credit hours)	
	5(c): Patient care review (22 credit hours)	
	5(d): Self-assessment (22 credit hours)	
VI	Other meritorious learning experiences	45

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MUNICIPAL GOVERNMENT MANAGEMENT

There is no mandatory licensure or certification of municipal managers in Pennsylvania. However, a municipality must meet specified operational criteria if its manager is to join the International City Management Association (ICMA) and the Association of Pennsylvania Municipal Managers (APMM), the professional organizations for local government managers.

BACKGROUND INFORMATION

Anyone can be a local government manager in Pennsylvania, as in all other states. Georgia is the only state to attempt to introduce certification of municipal managers, and at this time their certification is a voluntary program. Regulation of municipal managers is not generally sought by practitioners or by their professional associations.

Because of this lack of regulation, the backgrounds, education, and experiences of municipal managers vary widely. In many Pennsylvania boroughs and townships managers are not professionally trained, but are simply people who have agreed to serve in a managerial capacity. However, other managers have substantial amounts of relevant education and experience. Both types of managers are concerned with professional organization and development.

Each municipality sets its own standards for the education and experience of the manager it will employ. Municipalities may seek managers with a baccalaureate degree in fields such as engineering, political science, business administration, or public administration; or a master's of public administration. Experience is frequently considered desirable also, and may be obtained by working as an assistant manager; manager of a small local government unit; or as a financial, personnel, or other officer in a local government operation.

ICMA and APMM provide continuing education, a forum for discussion, and information dissemination for their members. The structure of the governmental body managed and the criteria of the manager's position, rather than the qualifications of the manager, make an individual eligible for membership. A manager wishing to join either ICMA or APMM must occupy either a council-manager position or a general management position, as determined by an evaluation conducted by APMM. This determination is based upon review of a number of factors including appointment to the position, budget responsibilities of the position, organizational relationship between the manager's position and other departments, and appointing authority of the manager. It should also be noted that municipal managers must be appointed, not elected.

Approximately 185 municipalities in Pennsylvania are currently recognized by APMM as meeting the standards discussed above, and this number is growing as more management positions are developed and recognized each year. APMM evaluates approximately fifteen municipalities for initial recognition yearly. It is estimated that

Pennsylvania has about 205 municipal managers (some of them in municipalities not yet recognized by APMM) at this time, making it one of the leaders in the country. A large number of municipal management positions are expected to open up in New York within the next few years as a result of new legislation there.

APMM has an annual three day conference, held in the city of the current president. This is basically a continuing education program. Forty to fifty members attend these meetings. APMM also reaches the managers of boroughs and townships at their association meetings. All work of APMM is accomplished through volunteer effort.

Once APMM has recognized a municipality, ICMA will also accept its manager as a member. ICMA holds annual educational meetings and has developed a sophisticated professional development program based on the needs of individual members.

CLIMATE FOR CONTINUING EDUCATION

APMM and ICMA provide continuing education for their members at conferences. Penn State provided the annual conference program a few years ago when the conference was held in State College, and APMM has received requests for future programs similar to that one. APMM exhibits a strong interest in continuing education for its members.

Managers of many boroughs and townships belong to the municipal class association rather than to APMM. With this proliferation of associations, development of continuing education programs for managers might best be accomplished in conjunction with the managers' professional associations.

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NURSING
CERTIFIED REGISTERED NURSE ANESTHETISTS

There is no mandatory certification or licensure of nurse anesthetists in Pennsylvania. However, according to the Rules and Regulations of the State Board of Nurse Examiners for Registered Nurses (R.N.s), an R.N. can only administer anesthesia provided he or she is a Certified Registered Nurse Anesthetist (C.R.N.A.). This certification is national and is provided by the American Association of Nurse Anesthetists (AANA).

CERTIFICATION INFORMATION

To be certified as a C.R.N.A., an individual must:

I. Graduate from an approved school of nurse anesthesia.

II. Pay an examination fee.

III. Successfully complete the certification examination. This examination consists of 250 multiple choice questions. It may be retaken as many times as the individual desires, but only one retake is allowed without repaying the fee and reapplying for certification.

Certification is valid for two years.

RECERTIFICATION INFORMATION

To be recertified as a C.R.N.A., an individual must:

I. Be currently licensed as an R.N.

II. Be currently employed in the field of anesthesiology as an administrator, practitioner, or educator.

III. Have initial certification as a C.R.N.A.

IV. Provide evidence of participation in forty hours of approved continuing education within the past two years.

V. Pay a recertification fee.

Recertification is valid for two years.

BACKGROUND INFORMATION

Nurse anesthetists are responsible for the anesthetic management and care of the conscious and unconconscious patient. This care is most frequently given in the operating room or obstetrical unit. Sometimes the nurse anesthetist is called upon to help cardiac and respiratory arrest patients in the hospital as well as those who arrive in the emergency room. While most nurse anesthetists are directly employed by hospitals, some nurse anesthetists contract their services to hospitals on a freelance basis. Dentists may also employ nurse anesthetists.

There are approximately thirty AANA approved programs of nurse anesthesia in Pennsylvania. These programs can be certificate, baccalaureate, or master's degree programs. The average length of the programs is twenty four months.

There are approximately 1800 C.R.N.A.s in Pennsylvania.

CLIMATE FOR CONTINUING EDUCATION

The Pennsylvania Association of Nurse Anesthetists (PANA), the state chapter of AANA, is divided into seven districts. Both the local and state chapters offer continuing education programs. However, there has been some indication that it is difficult for some C.R.N.A.s to attend the local programs, which are usually evening meetings, due to the distance that must be traveled. PANA holds an annual meeting which is primarily educational. The national conference of AANA also offers continuing education programs as well as periodic workshops in I.C.A.R.E. and biophysics.

The significant amount of continuing education appears to be offered as in-service programming at hospitals employing nurse anesthetists. C.R.N.A.s may also attend the continuing education programs offered by other professional associations such as the American Medical Association and the American Nursing Association. Medical schools also offer some programs particularly designed for nurse anesthetists. However, all programs must be approved by AANA for an individual to receive continuing education credit for recertification.

Many C.R.N.A.s received their basic R.N. training from a diploma or associate degree program. However, there has been increased emphasis on the desirability of a baccalaureate degree for nurses in all areas of practice, and especially for those working as nurse anesthetists. Continuing education courses that would enable them to work toward a baccalaureate degree while employed have been suggested.

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NURSING
CERTIFIED REGISTERED NURSE PRACTITIONERS

The State Board of Nurse Examiners and the State Board of Medical Education and Licensure provide for a licensed registered nurse practicing in Pennsylvania to be certified as a Certified Registered Nurse Practitioner, with permission to that title and the initials "C.R.N.P."

CERTIFICATION INFORMATION

Under rules and regulations effective October, 1977, to be certified an individual must:

I. Be currently licensed as a Registered Nurse in the Commonwealth.

II. Successfully complete a course of study consisting of at least one academic year in a program administered by a department of nursing in an institution of higher education as approved by the boards.

III. Pay a certification fee.

A C.R.N.P. granted certification by another state board may be granted certification in Pennsylvania if the credentials are equivalent to those required in this state.

RECERTIFICATION INFORMATION

To be recertified, an individual must:

I. Be currently licensed as a Registered Nurse in the Commonwealth.

II. Pay a recertification fee.

Certified Registered Nurse Practitioners must maintain their certification through biennial recertification on or before October 30 of the odd numbered years.

Continuing education requirements: none.

BACKGROUND INFORMATION

Registered Nurse Practitioners were first recognized and established in 1965. Since that time, C.R.N.P.s have been trained in a variety of ways including training in doctor's offices, completing a special certificate course in a given nursing specialty, or completing a special master's program in nursing. This diversity of preparation for the profession has presented strong obstacles to determining guidelines for certification. Therefore, it is the current practice for the respective licensing boards to evaluate and certify an applicant on an individual basis. This procedure will most likely continue for the next year.

Voluntary certification of nurse practitioners is also given by the American Nurses Association and some other national specialty organizations. The ANA's certification program was organized to recognize individual achievement in specialized nursing practice, not as a mandatory requirement for practice. There are certification programs in each of the following Divisions on Practice: Division on Community Health Nursing Practice, Division on Gerontological Nursing Practice, Division on Medical-Surgical Nursing Practice, and Division on Psychiatric and Mental Health Nursing Practice.

To be certified by the ANA, an individual must:

I. Meet eligibility requirements, which include:

  A. Having a current license to practice as a registered nurse in the United States.

  B. Having experience as a registered nurse in the area in which certification is desired.

  C. Being currently engaged in the provision of direct patient care.

  D. Having completed the educational requirements as stipulated for the particular area of practice.

II. Complete an application form, including payment of an application fee. A certification fee is payable after the application has been accepted and prior to testing.

III. Pass an examination, which is administered and scored by an independent testing agency.

The certification board for each Division on Practice makes the final decision on certification. Each Division on Practice may have its own specific requirements in addition to the basic requirements listed above. Certification is valid for a five-year term, after which time an individual may submit credentials for re-certification as required by the specific Division of Practice.

The ANA certification is stringent. It is currently useful to nurses in obtaining merit raises and promotion. In the future, certification may be linked to reimbursement mechanisms for nursing services or may be required for specialty practice. It is not a basis for job requirements, although in Pennsylvania a nurse acting as a patient advocate for commitment in the mental health area must be certified by the ANA.

CLIMATE FOR CONTINUING EDUCATION

The licensing boards are still in the process of determining exact requirements for approved programs for C.R.N.P.s and what will constitute "evidence of competency" for recertification.

It is currently proposed that the course of study preparing an R.N. for C.R.N.P. certification will be based in college credit, but may be supplemented by some type of continuing education.

The ANA does not offer courses or study guides and there may be some value in in-depth courses to prepare for ANA certification. It is anticipated that certification of C.R.N.P.s will grow whether through state mechanisms, ANA, or other organizations.

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NURSING
LICENSED PRACTICAL NURSES

Practical nurses must be licensed in order to practice in Pennsylvania. Licensure recipients are permitted to use the title "Licensed Practical Nurse" and the initials "L.P.N."

LICENSING INFORMATION

To be licensed, an individual must:

I. Be a graduate of an approved practical nursing program. There are fifty-two schools in Pennsylvania offering programs that are approved by the State Board of Nurse Examiners. All practical nursing programs are one year in length, a determination that is set by law.

II. Pay a fee.

III. Pass the licensure examination. This is a national examination that is offered by the State Board of Nurse Examiners each April and October in Pennsylvania. It is administered by a national testing service.

Licensure by waiver was available to those individuals who were working as practical nurses before to the establishment of an approved educational program and approved schools in 1953. Prior to this time, individuals who performed nursing duties for a period of several months could obtain statements from a physican and two registered nurses with whom they had worked declaring that they had demonstrated the necessary capabilities and competencies to allow them to be recognized as a practical nurse.

Individuals who became nurses under this procedure were permitted to continue to practice even after licensing by examination became mandatory for newcomers to the profession. They were called "waiver practical nurses" since the examination was waived for them.

In recent years, waiver nurses have been allowed to sit for the examination if they so desired. Many of them have done this and became "licensed practical nurses by examination."

Licensure by endorsement may be issued to a graduate of a practical nursing program who has completed a course of study considered to be equivalent to that required in Pennsylvania, and who is licensed by examination in any other state or territory of the United States or Canada.

RELICENSING INFORMATION

To maintain licensing, an individual must renew the license biennially by paying a specified fee. An additional fee is charged if a license is lost, or as a penalty for late application.

Continuing education requirements: none.

BACKGROUND INFORMATION

LPNAP, as a state organization, is part of the National Association for Practical Nurse Education and Service. There are also a number of district organizations throughout the state. This network of local, state, and national organizations maintains an active lobby on state and national levels.

Licensed practical nurses describe themselves as striving for recognition. This attitude can be traced to the history of the profession. The first approved educational program for practical nursing was established only twenty-six years ago. Prior to that time, a person could become a practical nurse without any related educational experience and with only a minimal amount of practical experience. Many hospitals refused to permit practical nurses to work in their institutions. Practical nurses feel that their profession has been upgraded tremendously since the establishment of approved educational programs and licensing regulations. However, they are still conscious of having to combat the image that was created earlier when regulation of practical nursing was minimal.

CLIMATE FOR CONTINUING EDUCATION

Continuing education programs are offered through a large number of schools and nursing organizations. At this time, these programs do not need approval since participation in them is voluntary. However, if continuing education becomes a relicensing requirement, an approval system will have to be established.

Licensed practical nurses generally participate in the same continuing education programs that registered nurses attend, although there are occasionally programs offered that are designed primarily for licensed practical nurses.

Participation in voluntary continuing education has been good, according to educators in this field. Hospitals employing licensed practical nurses often pay either the continuing education program registration or the individual's salary for the time spent attending the program, or both. This practice serves to encourage continuing education participation.

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NURSING
NURSE MIDWIVES

In Pennsylvania nurse midwives are licensed by the State Board of Medical Education and Licensure, but their standards of practice are governed by the Pennsylvania Department of Health.

LICENSING INFORMATION

To be licensed, an individual must:

I. Be a registered nurse (R.N.) with a current license to practice in Pennsylvania.

II. Have completed an approved course in nurse midwifery. Approved courses may be either:

   A. An eight-month program in midwifery, or

   B. A two-year, master of science in nursing program, including curriculum leading to certification in nurse midwifery.

   Courses must be approved the American College of Nurse-Midwives (ACNM) to be are acceptable to the Board.

III. Pay a fee.

IV. Meet ONE of the following requirements:

   A. Obtain a score of 75 percent or better on an examination administered by the Board, or

   B. Successfully complete ACNM's certifying examination and receive certification from ACMN.

REGISTRATION INFORMATION

Licenses are good for life, but must be registered in order for the individual to practice nurse midwifery. License registration is accomplished by payment of a registration fee. Registration of licenses for midwives expire biennially, on December 31 of each even-numbered year. Biennial registration fees are determined by the Board.

Continuing education requirements: none.

BACKGROUND INFORMATION

Nurse midwifery is considered by many to be an emerging profession. Of the approximately 1,700 midwives registered in the country, over half have graduated since 1969. Some states still do not recognize nurse midwives nor grant them hospital privileges.

ACNM certifies nurse midwives. Their certification is a professional designation, not a license to practice. The Pennsylvania Chapter of ACNM has about fifty-eight members, and holds meetings in various locations throughout the state several times a year. There are about 150 nurse midwives licensed to practice midwifery in the Commonwealth.

The School of Nursing, University of Pennsylvania has implemented an M.S.N. program to prepare nurse midwives. The first students will complete the program in December, 1981.

CLIMATE FOR CONTINUING EDUCATION

Although no continuing education is required for nurse midwives to retain their licenses, refresher programs are considered desirable. Booth Maternity is the only institution in Pennsylvania offering continuing education specifically for midwives at this time, and it appears to meet the professions' needs in Pennsylvania.

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NURSING
REGISTERED NURSES

The Professional Nursing Law in Pennsylvania provides for mandatory licensing of individuals engaged in the practice of professional nursing by the State Board of Nurse Examiners. Licensure also permits the recipient to use the title "registered nurse" and the letters "R.N."

LICENSING INFORMATION

To be licensed, an individual must:

I. Be a graduate of an approved program of professional nursing in Pennsylvania or any other state where the qualifications for licensure are the same as those in Pennsylvania. Program approval in this state is granted by the Pennsylvania State Board of Nurse Examiners. Approved programs include:

A. Two-year programs leading to an Associate Degree in Nursing,

B. Diploma programs, and

C. Bachelor of Science in Nursing programs.

II. Pay a specified fee.

III. Pass the national licensure examination. This examination, developed by the National League for Nursing, is given twice yearly by the State Board of Nurse Examiners. Applicants for licensure may take the examination upon completion of an approved program as described above, or at any time thereafter.

A license without examination may be issued to a graduate of a school of nursing who has completed a course of study in nursing considered to be equivalent to that required in Pennsylvania at the time such course was completed, and who is licensed by examination in any other state or territory of the United States or Canada.

RELICENSING INFORMATION

Licenses expire biennially on the thirty-first day of October of even-numbered years. Relicensing is accomplished by completion of an application form and payment of a relicensing fee.

Licensed nurses may apply for inactive status. Upon receipt of the appropriate completed application form, the applicant shall be placed on inactive status without fee and shall be entitled to apply at any time to receive a current license by filing a renewal application and paying the relicensing fee.

Continuing education requirements: none.

BACKGROUND INFORMATION

As the health care field changes, so does the role of professional nurses. There has been continuing discussion within the nursing profession concerning the necessity or desirability of obtaining a baccalaureate degree, and many employers prefer to hire nurses who have graduated from four year degree programs. Another discussion has focused on the responsibilities R.N.s with varying academic preparation should assume. Because the R.N. designation can be attained with different educational backgrounds, some professionals feel that this designation should not be the sole determinant of an R.N.'s role.

To date there has been no legislation in Pennsylvania requiring the completion of the baccalaureate degree for professional practice. Due to the extreme shortage of nurses, it is unlikely that the Commonwealth will require practitioners without baccalaureate degrees to complete that degree in order to continue practice. Two state trends are evident, however. First, diploma granting programs are decreasing in number and secondly, there are more nursing students enrolled in baccalaureate degree programs than in all other nursing programs combined. These trends may point the way for the future of professional nursing preparation.

CLIMATE FOR CONTINUING EDUCATION

Many continuing education courses for nurses are offered through colleges and universities in Pennsylvania. Other institutions, such as hospitals and visiting nurse organizations, can also prepare education programs and submit them to the Pennsylvania Nurses' Association for approval. PNA is accredited as an approver and provider of continuing education by the North Central Regional Accrediting Committee of the American Nurses Association.

PNA is currently supporting a voluntary system for continuing education for professional nurses in the Commonwealth. Participation in the voluntary program has grown steadily in the past few years. In 1980 there was a 33 percent increase in applications received over the previous year. At Penn State, enrollments in non-credit continuing education programs for nurses also have showed an increase of approximately 45 percent over the three-year period from 1975 to 1978; participants engaged in 26,219 program hours in fiscal year 1977-78. Hospitals employing nurses have generally paid for their participation in continuing education, but this practice appears to be dwindling as hospitals face rising costs in other areas.

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NURSING HOME ADMINISTRATION

Nursing home administrators, including any individual who is charged with the general administration of an institution or facility in which nursing care and related health services are provided for a period exceeding twenty-four hours, for two or more individuals not relatives of the administrator, must be licensed by the State Board of Examiners of Nursing Home Administrators. They are the only health care administrators for whom there is any licensure in Pennsylvania.

LICENSING INFORMATION

To be licensed, an individual must:

I. Be at least twenty-one years of age and of good moral character.

II. Meet ONE of the following options:

  A. Option 1

    1. Have a master's degree in health administration, and

    2. Have six months' administrative experience working in a nursing home or health-related facility.

  B. Option 2

    1. Have a baccalaureate degree,

    2. Have twelve months' experience as a nursing home assistant or associate administrator working under the supervision of a licensed administrator, and

    3. Have six credits of approved continuing education.

  C. Option 3

    1. Have a baccalaureate degree,

    2. Have served as a hospital administrator for two or more of the last five years, and

    3. Have six credits of approved continuing education.

  D. Option 4

    1. Be a registered nurse,

    2. Have eighteen months' experience as a nursing home assistant or associate administrator working under the supervision of a licensed administrator, and

3. Have six credits of approved continuing education.

E. Option 5

1. Have completed two years of college level study in an accredited institution,

2. Have twenty-four months' experience as a nursing home assistant or associate administrator working under the supervision of a licensed administrator, and

3. Have six credits of approved continuing education.

F. Option 6

1. Be a high school graduate,

2. Have twenty-four months experience as a nursing home assistant or associate administrator working under the supervision of a licensed administrator, and

3. Have six credits of approved continuing education.

III. Pass an examination given by Professional Examination Service and a written and/or oral examination conducted by the State Board.

IV. Pay a fee.

RELICENSING INFORMATION

Everyone holding a valid license as a nursing home administrator shall be deemed registered with the Board. A new certificate of registration must be applied for biennially.

To be re-registered, an individual must:

I. Submit evidence of attendance, during the immediately preceeding biennial period, at Board-approved continuing education program(s) or courses of study of not less than seventy-two hours.

II. Pay a registration fee.

BACKGROUND INFORMATION

Licensing of nursing home administrators started nationwide in 1970. At that time a Federal regulation stated that any nursing home or extended care facility wishing to participate in Medicare and Medicaid programs would have to have a licensed administrator by 1972. Between 1970 and 1978 all states adopted legislation or the licensing of nursing home administrators. The State Board in Pennsylvania currently is revising the eligibility requirements for individuals applying to sit for the examination.

Over 100 colleges and universities in the country have degree programs in health care administration. The Pennsylvania State University, the University of Pittsburgh, the University of Pennsylvania, and Temple University offer such programs in Pennsylvania. Eighty-one percent of Penn State's health planning and administration baccalaureate graduates either find employment in this field or enter graduate school. Penn State has graduated over 700 baccalaureate students in health planning and administration since 1970.

The American College of Nursing Home Administrators, located in Washington, D.C., is a national professional organization for nursing home administrators. The association has twelve regional chapters and provisions for state chapters. Membership is open to any person actively engaged in full-time work as a nursing home or extended care facility administrator. The College has approximately 6,200 members, and estimates that there are 24,000 employed nursing home administrators in the country. The number of licensed administrators is greater, but some licensed individuals have retired or entered other lines of work.

Nursing home administrators report that reciprocity is a large problem for them. Each state sets up its own licensing laws, which vary considerably from state to state. Thus an administrator moving from one state to another may be required to go through the entire licensing procedure in the new state. In an attempt to provide some uniform guideline or measurement, the American College has approved by-laws for the creation of a certification program for nursing home administrators. This would provide a professional designation, based upon passage of an examination. Recertification would be required every five years or so.

CLIMATE FOR CONTINUING EDUCATION

Because nursing home administrators are a recently licensed profession, those in the field have recognized the need for continuing education to bring practitioners coming from a wide range of backgrounds to a common standard. The Federal government, when it passed the legislation requiring licensing in 1970, established guidelines for continuing education. These guidelines have been given to each of the states for their consideration, but each state sets its own standards for continuing education. The State Board currently is revising Pennsylvania's continuing education regulations. It has proposed that forty-eight hours of continuing education be required biennially, and recommended revision of the procedure providers must follow to obtain Board approval.

The American College offers continuing education programs throughout the country, primarily at facilities where chapters of the College are located. There is a strong market for continuing education in this area. Not only nursing home administrators, but managers of rural medical centers and small health agencies (such as home health care, family planning centers, etc.) would provide a substantial target audience. The Penn State Health Planning and Administration program is interested in, and has the capability for, continuing education programs to meet the needs of nursing home administrators.

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OCCUPATIONAL THERAPY

There is no licensure of occupational therapists in Pennsylvania. However, voluntary national certification and registration is provided by the American Occupational Therapy Association (AOTA).

CERTIFICATION INFORMATION

To be certified as an Occupational Therapist (OTR), an individual must:

I. Meet ONE of the following options:

A. Have a baccalaureate degree in occupational therapy from a program accredited by both AOTA and the Committee on Allied Health Education and Accreditation of the American Medical Association, or

B. Have a baccalaureate degree in a related field, plus a master's degree in occupational therapy, or

C. Be a Certified Occupational Therapist Assistant with at least four years of experience in occupational therapy, and be approved by the AOTA Career Mobility Review Committee.

II. Complete a six-month supervised internship in occupational therapy at an established student training center approved by the school or the Career Mobility Review Committee. After completing the internship, the individual is rated on a national evaluation instrument for assessment purposes.

III. Pass an examination and pay an examination fee. The examination is offered twice a year.

IV. Pay a certification fee. When an individual meets all the certification requirements, he/she automatically becomes registered.

RECERTIFICATION INFORMATION

An individual must pay an annual renewal fee.

Continuing education requirements: none.

AOTA has proposed that a written examination every five years and/or continuing education on an annual basis be required for recertification. However, this suggestion has not been implemented.

BACKGROUND INFORMATION

Licensure for the practice of occupational therapy is required in fourteen states and pending in several others. Although the majority of occupational therapists are registered, AOTA feels that many unqualified people are practicing occupational therapy, creating a need for greater control over practitioners. Action has been taken to develop licensing legislation in Pennsylvania, but the issue is currently at a standstill.

CLIMATE FOR CONTINUING EDUCATION

Continuing education is offered on a large scale through AOTA on both national and state levels. In Pennsylvania, continuing education is also offered at the three schools which have accredited occupational therapy programs: The University of Pennsylvania, Temple University, and Elizabethtown College. There is active participation in the programs.

It appears that there are not enough degree programs for training occupational therapists, for there is a high vacancy rate in occupational therapy positions. The situation in the state may become more acute since the University of Pennsylvania is phasing out its program. Two of the reasons for the lack of occupational therapy programs are the shortage of qualified faculty and the difficulty in getting funding to initiate programs.

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OPTOMETRY

The State Board of Optometrical Examiners licenses Doctors of Optometry to practice optometry in Pennsylvania. It is unlawful for any person to practice optometry or hold himself/herself out as a practitioner of optometry in Pennsylvania unless he/she is licensed by this Board.

LICENSING INFORMATION

To be licensed to practice optometry an individual must:

1. Hold a Doctor of Optometry degree from an accredited optometric educational institution in the United States or Canada.

II. Be at least twenty-one years old, have completed the educational requirements prescribed by the Board, and be of good moral character. An applicant must not be addicted to alcohol, narcotics, or other habit-forming drugs.

III. Pay an application fee.

IV. Pass specified examinations. As of July, 1981, an individual must pass all parts of a written examination given by the National Board of Examiners in Optometry. The three parts of this examination generally are taken during the second, third, and fourth year of optometry school. An individual must also pass the state-developed practical examination, a two-day test given twice a year at the Pennsylvania College of Optometry.

V. Pay a registration fee.

The Board may establish further requirements for optometric graduates from unaccredited schools or colleges of optometry.

Licensure requirements do not apply to optometrists employed in the United States Armed Forces, the Public Health Service, the Veterans' Administration, or other federal services.

Licenses without examination may be issued to optometrists who have passed a standard examination in optometry in any other state or all parts of the examination given by the National Board of Examiners in Optometry, provided that the examination standards are equivalent to those in Pennsylvania. An optometrist who is licensed in another state and has practiced in that state for at least four years immediately preceding application to Pennsylvania also may be licensed without examination. The Board may impose additional uniform educational requirements before granting a license without examination.

RELICENSING INFORMATION

Relicensure is obtained by paying a biennial fee.

Continuing education requirements: Beginning with the 1982 renewal, optometrists must have completed a minimum of twenty-four hours of Board-approved continuing professional optometric education during the two-year licensure period to qualify for license renewal.

BACKGROUND INFORMATION

The Pennsylvania College of Optometry in Philadelphia is the only school of optometry in Pennsylvania. The school technically requires a minimum of three years' undergraduate education, but in practice very few students are admitted without a B.S. degree, and some have M.S. degrees when admitted. The undergraduate coursework must include a number of science courses. For individuals admitted with three years of undergraduate work, the fourth year can be taken during the first year of optometry school, with a B.S. degree awarded at the end of that year. The four year optometry program leads to the Doctor of Optometry (O.D.) degree.

The field of optometry has several specialty areas. National certification of these specialties is not established, although a movement is underway to develop specialty certification. Specialties include contact lenses, visual therapy, low vision, and orthokeratology. An optometrist can limit his practice to a specific area but cannot legally claim to be a specialist.

The American Optometric Association (AOA) is the national professional association of optometrists. There are also state and local chapters. The Pennsylvania Optometric Association (POA) is a particularly strong association and is very active as a lobby group.

There are approximately 1,100 active licensed optometrists in Pennsylvania.

CLIMATE FOR CONTINUING EDUCATION

Continuing education for optometrists is extensive. It is offered through various professional associations as well as the schools of optometry.

AOA offers the Optometrist Recognition Award, a voluntary program whereby members must complete 150 hours of continuing education within three years to obtain the award. Thereafter, fifty hours of continuing education are required annually.

The American Academy of Optometry is a national organization that offers educational programs relating to clinical research. It also produces home study courses that can be taken by an individual or in a group study format.

The Pennsylvania College of Optometry has a well developed program of continuing education and delivers these services throughout the state. POA and its 14 local chapters also sponsor continuing education.

If the programs are to apply for credit towards the Optometrist Recognition Award, it must be approved by AOA. Otherwise, POA is approved to provide programs in the state. Approximately six hours of continuing education are annually offered by some local chapters, and sixteen hours are annually offered through POA. Several other regional and district programs are held, the advisability of a chapter's offering its continuing education programs through a continuing education center has been stressed. In such cases, expertise is generally provided by professionals in the field or faculty members from the Pennsylvania College of Optometry, while all facilities and arrangements are handled by the continuing education center.

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PERSONNEL MANAGEMENT

There is no mandatory licensure or certification of personnel managers. However, three types of voluntary national certification exist: personnel generalists and specialists may be certified by the Personnel Accreditation Institute (PAI). The American Compensation Association (ACA) certifies compensation specialists, and the Wharton School of Business, in cooperation with the International Foundation of Employee Benefit plans, sponsors a Certified Employee Benefit Specialist program.

CERTIFICATION INFORMATION

PAI offers two categories of accreditation, with two levels of accreditation within each category. The term accreditation is used synonymously with certification by PAI. Individuals are accredited as personnel specialists or generalists at the basic or advanced level.

To become an Accredited Personnel Specialist (APS), an individual must:

I. Have six years of experience in the field. Education may be substituted up to a maximum of five years.

II. Submit two professional service related references.

III. Successfully complete a functional area examination at the specialist level. Functional areas include employment, placement, and personnel planning; training and development; compensation and benefits; health, safety, and security; employee and labor relations; and personnel research.

IV. Pay a fee.

To become an Accredited Personnel Diplomate (APD), an individual must:

I. Have ten years of experience in the field. A maximum of five years of education may be substituted for the experience requirement.

II. Submit four professional service related references.

III. Successfully complete a functional area examination at the diplomate level.

IV. Pay a fee.

To become an Accredited Personnel Manager, (APM), an individual must:

I. Have six years of experience in the field. Education may be substituted for the experience requirement up to a maximum of five years.

II. Submit two professional service related references.

III. Successfully complete the generalist examination at the APM level. The comprehensive examination covers the functional areas described above as well as management practices.

IV. Pay a fee.

To become an Accredited Executive in Personnel (AEP), an individual must:

I. Have ten years of experience in the field. A maximum of five years of education may be substituted for the experience requirement.

II. Submit four professional service related references.

III. Successfully complete the generalist examination at the AEP level.

IV. Pay a fee.

Degree candidates and recent college graduates may take either of the basic level examinations even though they do not meet the work experience requirements. If they pass the examination and complete the specific experience requirements within three years, full accreditation will be granted as soon as they submit evidence of meeting the work experience requirements. There is a fee for this provision.

Certification of practitioners specializing in compensation is offered by the ACA's Certified Compensation Professional Program, which includes nine courses in the compensation field which are offered in various cities.

To become a Certified Compensation Professional (CCP), an individual must:

I. Earn a score of 75 percent or better on examinations for Courses I through IV, and one additional examination chosen from Courses V through IX. These requirements must be completed within a forty-eight month period. An individual need not take the formal coursework through ACA before sitting for an examination.

II. Pay an examination fee per examination.

Individuals specializing in employee benefits may become Certified

Employee Benefit Specialists through a program co-sponsored by The Wharton School of the University of Pennsylvania and the International Foundation of Employee Benefit Plans. The Certified Employee Benefit Specialist Program includes a series of ten courses offered through correspondence study or formal classes throughout the United States.

To become a Certified Employee Benefit Specialist, an individual must:

I. Successfully complete a series of ten examinations covering specialty areas within the employee benefits field. Courses are available to prepare individuals for the examinations, but such coursework is not required.

II. Pay an initial registration fee and an examination application fee.

RECERTIFICATION INFORMATION

Individuals accredited through the PAI must be reaccredited every three years.

To be reaccredited, an individual must:

I. Successfully complete a written examination consistent with the type and functional area of the original accreditation and at the appropriate level.

OR

II. Earn three reaccreditation units (RUs) through a variety of specified activities, including continuing education coursework, teaching, publishing, research, and other certification programs. One RU is equivalent to two Continuing Education Units (CEUs).

III. Pay a fee.

The ACA currently has no provisions for recertification.

Certified Employee Benefit Specialists currently need not participate in continuing education to remain certified. However, future plans of the sponsoring organizations include developing a continuing education program which may become mandatory for recertification.

BACKGROUND INFORMATION

The personnel field is very broad, encompassing persons working as generalists or specialists in a wide variety of settings. While large organizations may employ a whole personnel staff with specialists in particular areas, smaller companies often have just one personnel manager, the personnel generalist. In some very small businesses, personnel management might be assumed by a person with other administrative responsibilities. Personnel specialists work in such areas as selection, placement, and personnel planning; training and development; compensation and employee benefits; health, safety, and security; employee and labor relations; and personnel research. Personnel generalists are practitioners whose management responsibilities span multiple function areas.

A college education is generally an entry level requirement in personnel management, and some administrators have a graduate degree in a field such as industrial psychology or business. Increasingly, personnel managers in large corporations are persons who have had administrative experience in other business areas within the company. Although a broad variety of academic backgrounds is acceptable, some personnel management coursework is desirable. Because of the preponderance of federal regulations, the need for expertise in the personnel field is increasing. Certification can offer personnel managers that needed expertise as well as provide updated knowledge. Currently, however, certification is strictly voluntary.

Several national professional associations exist; the largest for personnel managers is the American Society for Personnel Administration (ASPA), which was formed in 1948. There are twelve local chapters in Pennsylvania, and they usually hold regular meetings which include an educational component and a time to share ideas and problems. ACA is geared specifically to practitioners in the compensation field. Although it does not have local chapters, there are unaffiliated compensation associations in some major cities in the United States. The International Foundation of Employee Benefit Plans, established in 1954, is the largest educational association in the employee benefit field; it co-sponsors the Certified Employee Benefit Specialist Program. The American Society for Training and Development (ASTD) serves the professional needs of specialists in training, adult education, and human resource development. ASTD has operated for over thirty years and has a network of about 100 chapters nationwide. The American Management Association (AMA) includes persons in all types of management situations; it has insurance and employee benefits and human resources divisions.

CLIMATE FOR CONTINUING EDUCATION

Only PAI's accreditation program currently mandates continuing education for reaccreditation. However, continued professional development is encouraged by all the national professional associations, and each offers a variety of educational programs. ASPA conducts many seminars covering a wide range of personnel-related topics. Seminars are sponsored by affiliated local chapters, and are held in cities throughout the United States. Six different seminars are scheduled for Pennsylvania in 1980-81; they will be held in Allentown, Reading, and Philadelphia. The International Foundation of Employee Benefit Plans also sponsors educational meetings, with thirty-five to fifty being held throughout the country in 1980-81. ASTD and ACA also provide some continuing education programming through conferences, seminars, and institutes. AMA holds an annual human resources conference, and in addition conducts approximately fifteen courses for personnel generalists or specialists. Each lasts two to five days and is held in a major city. Pittsburgh and Philadelphia will be the sites for three of these workshops.

Although these professional associations offer a variety of training opportunities nationwide, many sections of Pennsylvania, particularly the western region, are distant from the program locations. In addition, the courses are often several days long, and many managers have difficulty scheduling such courses. With the increasing number of complex federal regulations, personnel managers or specialists have a great need for updated information. Persons who perform personnel management functions, but hold additional positions within small companies as well, have a need for continuing education programming which would increase their expertise in the personnel field. One-day workshops or courses which meet weekly for several weeks probably would attract individuals in the personnel field.

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PHARMACY

In Pennsylvania the practice of pharmacy is regulated by the Pennsylvania State Board of Pharmacy. This Board provides for the mandatory licensure of individuals who practice pharmacy in the Commonwealth.

LICENSING INFORMATION

To be licensed to practice pharmacy, an individual must:

I. Be eighteen years of age or over.

II. Be a graduate of an approved school or college of pharmacy.

III. Meet internship requirements of a minimum of 1,500 hours under the guidance of a registered pharmacist-preceptor.

IV. Pay an examination fee.

V. Pass an examination. This examination is national and runs for two days. There are two parts: theoretical and practical. Examination sites are in Pittsburgh and Philadelphia.

VI. Pay a registration fee.

VII. Pay a certification fee.

RELICENSING INFORMATION

Licenses are renewed biennially with the payment of a specified fee.

Continuing education requirements: There are no continuing education requirements, although a new pharmacy bill will be introduced soon which would require continuing education for relicensure. People in the field feel confident that it will pass, and that it is very necessary.

BACKGROUND INFORMATION

Approximately 10,000 pharmacists are registered in Pennsylvania, of whom 8,500 practice in the state. There are two main areas of pharmacy practice, community and hospital pharmacy. Some pharmacists also go into manufacturing and education.

Traditionally, there appeared to be a shortage of pharmacists. Today however, graduates of pharmacy schools are increasing in number and there are relatively few areas where shortages exist.

There are three major pharmacy professional associations, the American Pharmaceutical Association, the American Society of Hospital Pharmacists, and the National Association of Retail Druggists.

The four schools of pharmacy in Pennsylvania are Temple University, Duquesne University, The University of Pittsburgh, and the Philadelphia College of Pharmacy and Science.

CLIMATE FOR CONTINUING EDUCATION

Because of continuing technical and professional advancements and an increased demand for more comprehensive service, it is extremely critical that pharmacists be kept up to date. Many practitioners feel that an individual cannot function as a pharmacist without continuing education.

It is interesting to note that approximately 80 percent of all drugs manufactured in this country are manufactured within a fifty mile radius of Philadelphia.

Although there is no mandatory continuing education requirement for licensure or professional association membership, voluntary continuing education in many forms exists for pharmacists. The continuing education programs currently available are conducted by colleges of pharmacy and professional associations. In addition, some pharmaceutical manufacturers conduct seminars and representatives of the manufacturers provide information on new products as well as home study materials.

Some of the larger hospitals and drug store chains require inservice training of their pharmacists. Another source of information is the pharmacy journals, some of which print monthly articles on specific topics followed by a self-quiz. Several references, such as Pharmacy Index and Facts and Comparisons, feature new and discontinued products, packaging innovations, and monographs on selected topics.

The younger generation of pharmacists in particular is pushing for continuing education to complement their clinical environment training; however there are some pharmacists who do not support a continuing education requirement.

In addition to pharmacy subject matter courses, continuing education offerings dealing with such subjects as operating a small business and the psychology of better relations with patients and physicians would be beneficial to pharmacists.

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PHYSICAL THERAPY

Pennsylvania has mandatory licensure for the practice of physical therapy. The Pennsylvania Physical Therapy Practice Board is the licensing body.

LICENSING INFORMATION

To be licensed to practice physical therapy in Pennsylvania, an individual must:

I. Meet ONE of the following education requirements:

  A. Have a baccalaureate degree in science or physical therapy, or

  B. Have a baccalaureate degree in a science field and a master's degree in physical therapy, or

  C. Have a baccalaureate degree in a science field and a certificate in physical therapy indicating completion of a twelve-month program of graduate study in physical therapy.

II. Pay a fee.

III. Obtain a score of 75 percent or better on the physical therapy licensing examination. The examination, prepared by Professional Service Examinations, is a two-day state written test given each May or June and October.

Pennsylvania grants licenses by reciprocity to individuals licensed by all other states except New York, California, and New Mexico.

RELICENSING INFORMATION

Licenses are renewed annually by payment of a fee.

Continuing education requirements: none at this time.

BACKGROUND INFORMATION

There are 1,500 to 2,200 licensed physical therapists in Pennsylvania. The State Physical Therapy Practice Board surveys physical therapy practice in the Commonwealth, checking for practice by non-licensed individuals and investigating reports of malpractice.

The physical therapy departments of most institutions expect their staff members to belong to the Pennsylvania Physical Therapy Association and its parent organization, the American Physical Therapy Association (APTA). The national organization exerts a strong influence on the profession, to the extent of effecting state licensure requirements through their APTA guidelines. The Pennsylvania organization is divided into six districts.

Requirements for licensure and relicensure of physical therapists are likely to undergo some slow changes. The American Physical Therapy Association is suggesting that a prescribed number of continuing education units be added as a requirement for relicensure, and Pennsylvania is expected to adopt that requirement within the next few years. Within a decade, a master's degree may be added as a requirement for licensure.

There are physical therapy specialty areas in almost all fields of medicine--pediatrics, burns, orthopedics, cardiology, etc. Specialization in any of these areas requires additional continuing education, but no additional certification. The Pennsylvania Bureau of Vocational Rehabilitation requires that physical therapists working with amputees have post-graduate training in prosthetics.

CLIMATE FOR CONTINUING EDUCATION

Pennsylvania offers a substantial amount of continuing education for physical therapists, but since it is voluntary many physical therapists do not participate. If continuing education is mandated for relicensure as expected, enrollment will increase substantially. Most continuing education is provided by the Pennsylvania Physical Therapy Association and by the local districts, although the University of Pittsburgh, Temple University, and hospital therapy departments within each district offer some programs.

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PHYSICIAN ASSISTANTS

Under Act 79, amending the Medical Practice Act of 1974, the State Board of Medical Education and Licensure certifies and controls the practice of physician assistants (PAs) in Pennsylvania.

CERTIFICATION INFORMATION

To be certified as a PA, an individual must:

I. Be of good character and reputation.

II. Have been graduated from a program for training and education of PAs that is accredited by the American Medical Association's Committee on Allied Health Education and Accreditation.

III. Pass the national certifying examination developed and given by the National Commission on Certification of Physician Assistants (NCCPA). A fee is charged to sit for the examination.

IV. Pay an application fee.

A PA must be supervised by a registered supervisory physician. The supervising physician must register as such with the State Board of Medical Education and Licensure, paying a registration fee. A physician may supervise no more than two PAs.

A similar program for certification of PAs exists under the Pennsylvania Osteopathic Medical Practice Act. The State Board of Osteopathic Medical Examiners certifies PAs, also recognizing the NCCPA examination as the accepted proficiency measure.

RECERTIFICATION INFORMATION

PAs must renew certification biennially. To renew certification, an individual must:

I. Maintain national certification by the NCCPA, which requires 100 hours of continuing medical education (CME) biennially. A minimum of forty of those hours must be earned in Category I. The remaining sixty hours may be taken from Category II or a combination of Category I and Category II experiences. The American Academy of Physician Assistants maintains a record of CME hours for all PAs certified by NCCPA or hours may be logged directly with NCCPA.

II. Pay a biennial renewal fee.

BACKGROUND INFORMATION

PAs are members of a new category of allied health workers that has developed during the past decade. The concept for this profession came from ex-military corpsmen who wanted to put their experience to use in civilian settings. While PAs do not see their role as overlapping with that of nurses, they recognize a number of similarities between the functions of PAs and nurse practitioners.

Forty-five states have enacted legislation regarding the utilization of PAs. Pennsylvania has regulatory legislation, as described above, and regulations prescribing the functions a PA may perform.

The American Academy of Physician Assistants has about 7,500 members, and the Pennsylvania Society approximately 250. There are believed to be 12,000 to 13,000 practicing PAs in the country. The profession is growing rapidly, with about 1,500 people graduating from PA programs annually. The program at Hershey Medical Center is now graduating approximately thirty PAs each year. Employment of PAs within their field is 90 percent or higher.

There has been some movement toward specialization of PAs, especially in the surgical area. There are now several postgraduate surgical PA educational programs, and there is a specialty Board examination for surgical PAs.

CLIMATE FOR CONTINUING EDUCATION

Most of the AMA-approved Category I CME programs for physicians are open to PAs. The American Academy of Physician Assistants also conducts CME programs. Hahnemann Medical College and Hospital and Geisinger Medical Center conduct quite a few CME programs specifically for PAs.

As the number of PAs increases, the need for CME programs for them will grow. Suggested CME topics include role development for PAs, a preparation course for the certifying examination, and discussion forums or panels tailored to the professional needs of PAs.

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PODIATRY

The State Board of Podiatry Examiners licenses individuals to practice podiatry in the Commonwealth of Pennsylvania. It is unlawful for any person to practice podiatry or assume the title of "Podiatrist," "Foot Specialist," or any other title, name, or description implying qualification to practice podiatry unless he/she is licensed by the Board.

LICENSING INFORMATION

To be licensed to practice podiatry, an individual must:

I. Complete a minimum of one year of college education in the liberal arts or sciences.

II. Graduate from a school of podiatry.

III. Pay an application fee.

IV. Successfully pass two examinations: The National Board, Parts I and II, and an examination developed by the state.

The National Board is a science oriented three day written examination. The examination is given at each of the five podiatry schools in the country. An examination fee is charged.

The one day state examination is written and comprehensive. It is given in June in Pittsburgh and Philadelphia, and in September, in Philadelphia only. A grade of 75 percent is needed to pass, and applicants cannot score below 55 percent on any portion of the examination.

V. Pay a registration fee.

RELICENSING INFORMATION

Licenses are renewed biennially with payment of a relicensing fee. A podiatrist also must submit evidence of carrying malpractice insurance.

Continuing education requirements: A podiatrist must complete sixteen hours of approved continuing education every two years.

BACKGROUND INFORMATION

The field of podiatry has been upgraded over the past two decades. Podiatrists are now accepted on hospital staffs, receive third party reimbursement on all major medical insurance plans, and have patients referred to them by physicians.

There are five schools of podiatry in the United States including the Pennsylvania College of Podiatric Medicine in Philadelphia. The schools offer a four year program culminating in the granting of a Doctor of Podiatric Medicine (D.P.M.) degree.

Admission requirements to the Pennsylvania College of Podiatric Medicine require a minimum of three years of undergraduate college work including a year's study in each of these sciences: biology, general chemistry, organic chemistry, and physics. However, only about 10 percent of those admitted do not have an undergraduate degree. For those individuals admitted with three years of undergraduate work, a contract option with a cooperating college allows for them to complete their fourth undergraduate year as a freshman in the school of podiatry. At the end of that year, they receive a baccalaureate degree from the cooperating college.

The Podiatry Hospital of Pittsburgh is one of three or four podiatry hospitals in the nation. It is a teaching hospital where podiatrists may complete a residency program. Podiatric residencies are available in other general hospitals as well.

Podiatry has five subdivisions within the profession, with certifying boards or specialty groups including surgery, radiology, dermatology, podiatric medicine, and podiatric orthopedics. Other areas of specialization or limited practice that are not nationally formalized include sports medicine, bio-mechanics, and geriatrics.

There are approximately 1,100 practicing licensed podiatrists in Pennsylvania.

A podiatrist will usually employ a podiatric assistant in his office to handle both front office procedures and preparation of patients. These people are generally trained by the podiatrist himself. Nationally, there is only one established program for podiatric assistants. It is an associate degree program at a community college in Maryland. There has been some preliminary action taken to develop additional training programs for podiatric assistants in conjunction with the podiatry colleges. A lack of funding resources is the primary drawback to implementing these programs.

The American Society of Podiatric Assistants (ASPA) is the national association for podiatric assistants. Until programs can be developed for podiatric assistants, a strong certification program at the national level cannot be developed. National membership in ASPA is about seven hundred with approximately fifty belonging to Pennsylvania chapters. ASPA offers continuing education for its members, and educational programs are also provided for podiatric assistants at the regional meetings of the American Podiatry Association

CLIMATE FOR CONTINUING EDUCATION

The Pennsylvania Podiatry Act of 1956 implemented an educational requirement for license renewal. Sixteen hours of "scientific" credit every two years must be completed. One scientific credit is equal to one clock hour in a seminar, discussion or other group learning situation. Listening to audio cassettes or journal reading does not qualify. All programs approved for license renewal must be approved by the State Board of Podiatry Examiners.

The Pennsylvania Podiatry Association (PPA) offers many educational programs including regional and divisional conferences and local programs. A surgical seminar is offered once a year and draws national and international participants.

Podiatrists may also participate in continuing education programs provided by colleges and hospitals, but must first be approved by the Pennsylvania Podiatry Licensing Board, if they are to be used to meet relicensure requirements.

As of January 1981, the American Podiatry Association (APA) has initiated a voluntary program of continuing education which recommends 150 credits every three years. Sixty of the credits should be scientific and obtained in structured learning situations; the remaining ninety may be obtained through attending hospital staff meetings, writing journal articles, or listening to audio-cassettes. Successful completion of the three-year program and payment of a fee will qualify the APA member for the Podiatry Recognition Award.

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PSYCHOLOGY

In Pennsylvania the private practice of psychology (including the use of titles incorporating the words "psychologist," "psychological," or "psychology") is regulated by the Pennsylvania Board of Psychologist Examiners under Act 52. Individuals licensed by the Commonwealth to practice any of the healing arts are exempt from the provisions of Act 52, and the practice and titling of school psychologists and persons employed as psychologists by federal, state, county, or municipal agencies is not limited under the Act.

LICENSING INFORMATION

To be licensed, an individual must:

I. Be of acceptable moral character.

II. Meet ONE of the following sets of requirements:

A. Option 1

1. Be a graduate of an accredited college or university holding a Ph.D. or D.Ed. degree in psychology or a related field, and

2. Have two years of post doctorate experience acceptable to the Board, with at least one year being under the direct supervision of a licensed psychologist.

B. Option 2

1. Be a graduate of an accredited college or university holding a master's degree in psychology or another of the behavioral sciences acceptable to the Board, and

2. Have four years of experience acceptable to the Board, following receipt of the master's degree, with two of the four years being under the direct supervision of a licensed psychologist.

At least two-thirds of an applicant's course work must be psychological in nature. An applicant's educational record must include course work in five basic areas of psychology.

III. Submit an application and pay a fee.

IV. Pass the national Examination for the Professional Practice of Psychology and a one-hour state examination which tests the applicant's knowledge of Act 52 and its rules and regulations.

Practicing psychologists who submitted applications to the Board prior to May 23, 1974, could be licensed without examination.

Pennsylvania has no reciprocity agreements with other states. However, an applicant licensed in another state having requirements equivalent to those in Pennsylvania may be licensed in this Commonwealth upon passing the state examination.

RELICENSING INFORMATION

To renew his/her license, an individual must pay a fee biennially. Licenses expire November 30 of each odd-numbered year.

Continuing education requirements: none.

BACKGROUND INFORMATION

Pennsylvania, one of the last states to adopt licensing of psychologists, has provided this licensure since 1972. The Board licensed 2,800 psychologists in Pennsylvania during the 1970's. Act 52 provides licensing only for the private practice of psychology, so that psychologists employed by schools, industries, or government agencies are not required by law to be licensed. However, the Commonwealth now requires that anyone employed as a psychologist in a State Civil Service position be licensed.

The national licensing examination is developed by the American Association of State Psychology Boards. Professional Examination Service (PES) distributes the examination for administration by the state boards, then scores it. Each state defines its own passing grade.

In addition to the national examination, psychologists wishing to be licensed in Pennsylvania must pass a one-hour, objective examination covering the contents of Act 52 and the state laws, rules, and regulations governing their practice.

CLIMATE FOR CONTINUING EDUCATION

Because of the volume of work involved in simply implementing licensure, the Board has not had significant time to consider the development of continuing education requirements for relicensure. This is an area of concern to the Board, however, and Board members are taking steps to determine the attitudes and participation patterns of psychologists in regard to continuing education.

A continuing education requirement serves a protective function for the public. If Pennsylvania adopts a continuing education requirement, there will be a need for offerings to enable psychologists to meet it. At the present time, the Penn State Department of Psychology together with other units of the University is developing plans for the delivery of continuing education programs.

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PUBLIC ACCOUNTING

Pennsylvania Law 318, No. 140 (The CPA Law), as amended, provides for the registration of public accountants. Public accountants engaged in the practice of public accounting as principals and as their principle occupation as of December 8, 1976 were eligible to register as Public Accountants. The registration period ended September 1, 1979. Those public accountants registered in the Commonwealth will be permitted to practice public accounting and to hold themselves out as "Public Accountants" until they terminate their practice, so long as they meet the requirements of the CPA law. All future entrants will be required to be Certified Public Accountants (CPAs). Therefore, this document addresses itself to the certification and licensure of CPAs.

CERTIFICATION AND LICENSING INFORMATION

Becoming a practicing CPA requires a certificate and a permit to practice. Both are issued by the State Board of Examiners of Public Accountants. In order to obtain the CPA certificate, an individual must fulfill the following general requirements. Specific regulations are detailed in The CPA Law, as amended.

I. Be a resident of Pennsylvania, be enrolled in a college or university in Pennsylvania, or be engaged in public accounting in Pennsylvania at the time he/she first sits for the examination.

II. Be at least eighteen years of age.

III. Be of good moral character.

IV. Meet ONE of the following education requirements:

A. Hold a baccalaureate, master's, or doctoral degree from an approved college or university, with twelve semester credits in accounting, or

B. Hold a baccalaureate, master's, or doctoral degree from an approved college or university, with twenty-four semester credits in accounting.

V. Meet ONE of the following experience requirements:

A. Individuals holding baccalaureate degrees must have two years of public accounting experience satisfactory to the Board.

B. Individuals with master's or doctoral degrees must have one year of public accounting experience satisfactory to the Board.

VI. Pass the written examination, which currently includes sections on accounting theory, accounting practice, auditing, accounting theory and practice topics, and business law. There is an examination fee.

Individuals at the baccalaureate, master's, or doctoral degree level who have only twelve credits in accounting are required to complete the appropriate work experience requirement before sitting for the examination. Individuals with twenty-four credits in accounting may sit for the examination prior to completing the appropriate work experience requirement. Students who have completed twenty-four credits in accounting may be permitted to take the examination during the final term of their senior year if it is reasonably expected that they will fulfill the education requirements and receive the required degree within ninety days after the examination date.

Without requiring a written examination, the Board may, at its discretion, issue the certificate of CPA. Applicants must meet specific requirements which are set forth in The CPA Law, as amended.

In order to obtain a permit to practice public accounting, an individual must:

I. Hold a current CPA certificate.

II. Apply for the permit.

III. Pay a fee.

RELICENSING INFORMATION

Permits to practice as a certified public accountant must be renewed biennially. In the past, biennial permits have been issued upon payment of a renewal fee, but as of September, 1981, the following conditions must be met for issuance of a biennial permit to practice:

I. Each individual filing an application for a renewal must, during the two-year period immediately preceding, complete eighty hours of continuing education as defined and deemed acceptable by the Board, to include specified numbers of hours dealing with accounting, auditing, and tax subjects. No carry-over of credits shall be permitted from one biennial period to another.

II. Pay a renewal fee.

BACKGROUND INFORMATION

The CPA examination is a national one, prepared and graded by the American Institute of Certified Public Accountants. Each state defines the examination grade that it will accept as passing. The examination is given in May and November of each year and is two and one-half days long.

In Pennsylvania an individual may take the CPA examination prior to obtaining the experience required for granting of the certificate, if he/she meets an education requirement of twenty-four credits of accounting. If the applicant passes the examination, the certificate will be granted upon completion of the experience requirement.

Only an estimated 15 to 20 percent of those taking the CPA examination pass it each time. The examination is in five parts, and an individual need re-take only those parts failed.

There are approximately 200,000 CPSs in the country, and about 15,000 in Pennsylvania. Of these, over 10,000 are members of the Pennsylvania Institute of Certified Public Accountants, which cooperates with but is independent of the American Institute of Certified Public Accountants. Accounting is a field in which the supply of practitioners has not yet caught up with the demand, and it is projected that the demand will increase in the foreseeable future. There is also a demand for higher education accounting faculty. For example, 100 doctoral degrees in accounting were granted in 1978, while there were 1,000 vacancies to be filled at this level, primarily in academe.

CLIMATE FOR CONTINUING EDUCATION

The continuing education requirements for relicensing are quite broad. They include at least thirty-two hours of accounting and auditing, sixteen hours of tax, and the remaining thirty-two hours to be chosen from among a wide range of suggested general subject areas. Many states have had similar legislation prescribing mandatory education for some time. The accountants in Pennsylvania have been very much in favor of this legislation, and played an active part in writing the legislation and lobbying for it. CPAs view mandatory continuing education as a means of quality control for their profession.

The American Institute of CPAs has a full-time staff to prepare and publish continuing education courses for use by the state societies. Numerous offerings are given by the Pennsylvania Institute of CPAs throughout the year and in various locations.

Private companies operating nationally appear to handle the examination preparation courses quite satisfactorily. Some of them stipulate that an accountant can re-take their course as often as necessary until passing the full examination. These courses cost from $400 to $800; frequently an accountant's employer pays this fee.

The in-house continuing education programs offered by some firms serve to keep their employees abreast of current developments in the field, and these courses can be used to meet the relicensure requirements for continuing education.

These three groups appear to meet the needs for continuing education programs in accounting, but there is some likelihood that other organizations, such as institutions of higher education, could perform a valuable function by offering continuing education programs for CPAs in areas other than accounting--management, computer science, economics, and business law, for example. Penn State currently sponsors a Graduate Accounting Conference and a Tax Conference, and other colleges and universities also are beginning to provide continuing education for accountants.

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RADIOLOGIC TECHNOLOGY

Radiologic technologists are registered nationally by the American Registry of Radiologic Technologists (ARRT). There is no certification, licensure, or registration of radiologic technologists in Pennsylvania.

REGISTRATION INFORMATION

To become a registered radiologic technologist, an individual must:

- I. Complete ONE of the following educational programs:
  - A. A two-year, hospital-based radiologic technology program approved by the Joint Review Committee of the American Medical Association, or
  - B. A college-based associate degree program, or
  - C. A baccalaureate degree program with a major in radiologic technology, which might include a minor in education or business administration for the person wishing to go into the education or management of radiologic technologists.
- II. Pass an ARRT examination administered by Educational Testing Service.
  - A. A fee is charged to take the examination.
  - B. The examination is given the third Thursday of January, July, and October each year.
  - C. The examination consists of 250 questions covering specified information areas.
  - D. Passing scores have been determined on the basis of a normal curve, allowing for a specified percentage of failures. However, a uniform passing score has now been established.
  - E. The examination may be taken three times. If an individual fails it all three times, he/she must obtain additional education before retaking it again.

Radiologic technologists may specialize in diagnostic radiology, nuclear medicine, or radiation therapy. The above-described registration qualifies an individual to work in diagnostic radiology as a radiologic technologist radiographer (R.T.R.). An additional year of training is necessary for specialization as either a radiologic technologist in nuclear medicine (R.T.N.M.) or a radiation therapy technologist (R.T.T.). A radiologic technologist also may specialize in ultrasound, which usually requires an additional year of education.

RE-REGISTRATION INFORMATION

Registration is renewed annually by payment of a specified fee.

Continuing education requirements: none.

BACKGROUND INFORMATION

Several other states license radiologic technologists, but Pennsylvania has no regulation of persons wishing to practice any form of radiologic technology. While hospitals generally require that staff members in this field be registered radiologic technologists, physicians, chiropractors, and dentists in private practices can and do hire individuals with limited or no training to perform radiological technology functions.

There are approximately 120,000 radiologic technologists registered nationally, and 6,000 in Pennsylvania. The supply of radiologic technologists appears to be in good proportion to the demand, although positions are not always available in all geographic locations.

There is some indication that more education may be required for registered radiologic technologists in the future, including a master's degree. Some schools currently offer nine-month radiologic technology programs, but since these programs are not AMA-approved, persons completing the programs are not eligible for registration. Individuals trained in the military as X-ray technologists may not take the registration examination without additional education.

CLIMATE FOR CONTINUING EDUCATION

Radiologic technologists express both a need and an interest in continuing education. The American Society of Radiologic Technologists (ASRT), the national professional organization, has worked in cooperation with ARRT to set up an Evidence of Continuing Education (ECE) program. For a fee, radiologic technologists may join and have a record of their continuing education participation maintained. Although continuing education is voluntary at this time, ASRT and ARRT encourage ECE members to participate in sixty continuing education hours every three years. Continuing education is expected to become mandatory for maintenance of registration in about five years.

The Pennsylvania Society of Radiologic Technologists holds an annual convention at which continuing education programs are offered. The several district chapters within the Commonwealth have monthly meetings (except during the summer) which are educational in nature and for which ECE points are usually given.

Radiologic technologists also express a need for general academic credit continuing education courses that might be applied to a degree program. People in this field sometimes feel uncomfortable with the educational gap that exists between them and other medical professionals; more general continuing education might help alleviate this problem and enable radiologic technologists to gain an appreciation of what their colleagues in related fields are doing.

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REAL ESTATE

Licenses for both real estate salespersons and brokers are issued by the Commissioner of Professional and Occupational Affairs. The State Real Estate Commission supervises and controls the licensing.

LICENSING INFORMATION

To be licensed as a salesperson, an individual must:

I. Be eighteen years of age or older and have sponsorship of a broker.

II. Have four credits (two courses) in real estate principles, law, sales, or finance. Only two credits are necessary if the individual holds a baccalaureate degree.

III. Pass an examination administered for the Commission by its appointed testing service.

IV. Pay a specified fee. If the examination is failed, a partial fee must be paid each time it is retaken.

To be licensed as a broker, an individual must:

I. Be twenty-one years of age or older.

II. Have sixteen credits as defined by the Commission, requiring the resubmission of the four credits taken to qualify for licensing as a salesperson.

III. Have three years of experience as a salesperson under the supervision of a licensed broker, or equivalent experience.

IV. Pass an examination administered for the Commission by its appointed testing service.

V. Pay a specified fee. If the examination is failed, a partial fee must be paid each time it is retaken.

Reciprocity exists with various states which the Commission feels have equivalent standards and requirements. Individuals coming from states with which reciprocity does not exist must take a portion of the respective licensing examination for salespersons or brokers; usually this portion deals with state law.

Limited licensure can be obtained by both salespersons and brokers who deal with the selling of cemetery plots, lots and mausoleum spaces. A salesperson must register with the Commission and pay a specified fee. A broker applying for a limited license must pass a limited examination over that specific area, meet the salesperson licensing requirements, have three years of experience as a salesperson, and pay a specified fee.

RENEWAL INFORMATION

Salespersons and brokers must pay a biennial fee. Applications for renewal of real estate broker's or salesperson's licenses should be made by March 1 of even numbered years.

Continuing education requirements: none.

BACKGROUND INFORMATION

Because the word REALTORS is a registered trademark, it will appear in capital letters throughout this report. There are approximately 220 active members of the Centre County Board of REALTORS and about 42,000 active, licensed salespersons and 12,000 brokers in the Commonwealth. The state professional organization, the Pennsylvania Association of REALTORS (PAR), is affiliated with the National Association of REALTORS (NAR). There are also fifty-two local Boards of REALTORS in Pennsylvania.

Several advanced positions within the real estate profession require some kind of national certification. Most of this certification is provided for through the REALTORS National Marketing Institute, the educational arm of the National Association of REALTORS, in Chicago.

The licensing examinations for salespersons and brokers in Pennsylvania are national examinations developed by Educational Testing Service, for which each state determines its own passing grade. An examination must be passed in its entirety, but unsatisfactory portions of the examination may be retaken an unlimited number of times. The salesperson examination is given every month at eleven sites across the state, and the the examination for brokers is given each February, May, August, and November at the same eleven sites.

There is a high failure rate among those taking the examinations. Various reasons have been offered to explain this: (1) the examination keeps changing, (2) "unexpected" questions are asked, and (3) the mathematics section is troublesome for many.

CLIMATE FOR CONTINUING EDUCATION

Most professionals in the field feel that there is a great need for continuing education, for both basic courses and professional up-dating. Mandatory continuing education requirements have been discussed, but no action has been taken to establish legislation addressing the issue.

Penn State has the largest real estate program in the Commonwealth. Duquesne University and The University of Pittsburgh also have large programs, and many other schools offer programs in real estate. All must submit an outline of their courses to the Commission for approval.

The credits required for licensure can be either college or proprietary school credits, or continuing education units. The Commission recognizes three CEUs as being equivalent to two college credits. Potential realtors can take courses through institutions of higher education, independent real estate schools, or programs offered through real estate professional organizations.

The Graduate REALTORS' Institute, sponsored by PAR, offers programs for continuing education and licensing needs and offers a certificate when three week-long courses are completed. This certificate is growing nationally in status as a designation among realtors; the initials "G.R.I." may be used after the realtor's name upon its receipt.

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RECREATION AND PARKS

Voluntary registration for recreation and parks personnel is available through the Pennsylvania Recreation and Park Society, Inc. (PRPS), the Pennsylvania affiliate of the National Recreation and Park Association (NRPA). Registration for therapeutic recreation personnel is also available through the National Therapeutic Recreation Society (NTRS), a branch of NRPA.

REGISTRATION INFORMATION

In order to receive provisional professional registration through PRPS, an individual must:

I. Hold a baccalaureate or higher degree from an accredited educational institution with a major in a recreation/park specialty. This type of registration expires in three years.

OR

II. Hold a baccalaureate or higher degree in any field from an accredited educational institution, be employed full time, and have at least five years of full time experience in a recreation/park specialty in an administrative, supervisory, or specialist capacity. This type of registration expires in two years.

In order to receive professional registration, an individual must:

I. Hold a baccalaureate or higher degree from an accredited educational institution with a major in a recreation/park specialty, have three years of full time experience in a recreation/park specialty, and be employed full time in a recreation/park position.

OR

II. Hold a baccalaureate or higher degree in any field from an accredited educational institution, be employed full time, and have at least seven years of full time experience in a recreation/park specialty in an administrative, supervisory or specialist capacity.

In order to be registered as a provisional technician, an individual must:

I. Hold an associate degree from an accredited educational institution with a major in a recreation/park specialty. This type of registration expires in three years.

OR

II. Hold an associate degree in any field from an accredited educational institution, be employed full time in recreation and parks, and have at least two years of full time experience in a recreation/park specialty This type of registration expires in three years.

OR

III. Successfully complete an NTRS-approved, 750 hour training program for the Therapeutic Recreation Technician I and have at least three years of full time therapeutic experience This type of registration expires in three years.

OR

IV. Be a high school graduate and be employed in recreation and parks with at least four years of full time experience in a recreation/park specialty. This type of registration expires in three years.

In order to be registered as a technician, an individual must:

I. Hold an associate degree from an accredited educational institution with a major in a recreation/park specialty, be employed full time in recreation and parks, and have three years of full time experience in a recreation/park specialty.

OR

II. Hold an associate degree in any field from an accredited educational institution, be employed full time in recreation and parks, and have at least five years of full time experience in a recreation/park specialty.

All PRPS members are required to pay an application fee.

REREGISTRATION INFORMATION

Provisional registrants must reapply for registration at the end of the expiration period. Provisional technicians are also required to pay a renewal fee. There is no reregistration procedure for non-provisional registrants.

Continuing education requirements: none.

BACKGROUND INFORMATION

The field of recreation and parks is very broad and includes persons working in a wide variety of settings such as state institutions, hospitals, community centers, youth organizations, resorts, nursing homes, and state and national parks. There are many areas of specialization within the field, including outdoor education, therapeutic recreation, industrial recreation, and geriatric recreation.

All share a common goal of helping people through more productive use of leisure time.

There are three general levels of recreation and parks personnel. Activity leaders (specialists, therapists) work face-to-face with people in direct helping relationships; for example, they may be playground leaders, outdoor educators, or camp leaders. Coordinators (supervisors, center directors) organize the efforts of the leaders below them; some examples of this level include a nature center director, a YMCA program director, or a creative movement coordinator in a treatment facility. Upper level managers may be called superintendents, executives, administrators, or commissioners; they plan and implement policy. A deputy commissioner of parks, executive director of the Girl Scouts, or director of leisure services would be considered an upper level manager.

Therapeutic recreation is one recreation and parks subgroup that has received increasing attention because of federal laws mandating special services for the handicapped. Therapeutic personnel work in settings such as schools, correctional facilities, health care institutions, or nursing homes. The subgroup has its own multi-level registration plan which has caused considerable divisiveness within the larger professional association.

State registration requirements generally reflect the amount of education required for different levels of professional status. In accordance with NTRS requirements, Penn State has developed a 750 hour therapeutic recreation package which it markets through CETA agencies, the Commonwealth Campuses, and NRPA-accredited institutions. Successful completion of the 750 hour training program qualifies the candidate for the level of Therapeutic Recreation Technician I or Provisional Technician, depending on whether it is the state or national registration plan. The Penn State program is open to high school graduates who receive a certificate of achievement upon completion. Other institutions have developed their own 750 hour programs. Most graduates seek employment as activity leaders.

The two year associate degree program is broader than the 750 hour program and is presently offered at the Ogontz and New Kensington campuses of Penn State. Although the program was originally developed to meet metropolitan area leadership needs, it now serves a wider clientele. Graduates generally assume positions similar to those of 750 hour program graduates.

About fifteen colleges and universities in Pennsylvania offer a baccalaureate degree in recreation and parks. The only programs in Pennsylvania accredited by NRPA are at Penn State, Temple University, and Slippery Rock State College. Of the 700 recreation/parks programs nationwide, twenty-one are accredited by NRPA. Many programs offer activity leadership training, but do not provide instruction in administrative skills for middle and upper level managers. Although graduates of four-year programs are prepared to enter at the middle management level, they often assume activity leader roles that promise mobility. Penn State also offers advanced degree programs. Master's and doctoral degree recipients generally pursue positions in college teaching or research.

The major professional association in the recreation and parks field is NRPA with its Pennsylvania affiliate, the Pennsylvania Recreation and Park Society, Inc. (PRPS). NTRS, a branch of NRPA, represents therapeutic recreation specialists nationally, while the Pennsylvania Therapeutic Recreation Society (PTRS), a branch of PRPS, represents Commonwealth Therapeutic Recreation specialists. Another related professional association is the American Alliance of Health, Physical Education, Recreation, and Dance (AAHPERD) and its Pennsylvania affiliate, the Pennsylvania Alliance of Health, Physical Education, Recreation, and Dance (PAHPERD). The latter two associations are strongly oriented toward physical educators.

The PRPS registration plan, like other state plans, meets NRPA guidelines. A registered Pennsylvania practitioner is automatically registered nationally. The same reciprocity does not exist between the NRPA and NTRS registration boards. A practitioner who is nationally registered as a therapeutic recreation specialist does not automatically qualify for other registration. There are about 200 PRPS registered persons in Pennsylvania. The total PRPS membership numbers about 1,400.

Professional registration is not required for employment in the recreation and parks field. Concerned recreation and parks professionals are working hard to raise the awareness of employers and the public of the importance of registration to ensure professional standards. Unregistered practitioners, especially those graduating from non-accredited educational programs, may damage the public image of a developing profession.

CLIMATE FOR CONTINUING EDUCATION

There is presently no continuing education requirement for reregistration in Pennsylvania, although PRPS is considering following the lead of Illinois and other states which do have such a requirement. The national board may eventually mandate a provision for continuing education.

Most continuing education for recreation and parks personnel in Pennsylvania is provided by the various state and national professional associations. Annual conferences of PRPS and PTRS always include an educational component. PTRS also sponsors one-day regional workshops throughout the state during a two-week period each year. Each workshop addresses a different content area such as grant writing, movement therapy, or medical documentation. The workshops are planned with all skill levels in mind. The national associations provide educational programming as well.

There have been problems in pulling together a critical mass of recreation and parks personnel for meaningful programs since they are scattered throughout the Commonwealth in many different work settings. Their needs are as diverse as their places of employment. In the past, fellow professionals have been most successful in organizing educational efforts. Outsiders have been perceived as having difficulty in assessing needs and targeting audiences. However, there is great interest on the part of the profession in cooperating with providers of continuing education to address unmet needs more systematically. The Penn State Department of Recreation and Parks is presently conducting a statewide continuing education needs assessment to help in such planning. Information is being collected from practitioners, faculty members, and professional associations.

Projects under consideration include energy audit procedures, safety institutes, reducing vandalism, and budgetary support measures. There is interest in utilizing innovative technologies to reach practitioners who do not take advantage of traditional modes of instruction such as group meetings or written materials.

NRPA has cooperated with continuing education divisions at schools such as Indiana University, North Carolina State University, University of Georgia, and University of Colorado to provide programming for recreation and parks personnel. However, Pennsylvania schools have not been very active in this area.

Upper-level public parks commissioners report a need for training in the management of a revenue-producing operation, budgeting, grant-writing, program evaluation, marketing, and public relations. Business skills are becoming a necessity today. Topics of interest to activity leaders and coordinators include leadership and interpersonal skills, working with special populations such as the elderly, low-cost programming, and volunteer training, especially for youth sports leaders and officiators.

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REHABILITATION COUNSELING

There is no mandatory certification or licensure of rehabilitation counselors in Pennsylvania. However, voluntary national certification is provided by the Commission on Rehabilitation Counselor Certification (CRCC), Chicago, Illinois.

CERTIFICATION INFORMATION

In order to become a Certified Rehabilitation Counselor (C.R.C.), an individual must:

I. Meet ONE of the following options:

   A. Have a master's degree in rehabilitation counseling from a Council on Rehabilitation Education (CORE) accredited rehabilitation counseling education program; or

   B. Have a master's degree in rehabilitation counseling from a rehabilitation counseling training program with a supervised internship, plus one year of acceptable experience under the supervision of a C.R.C.; or

   C. Have a master's degree in rehabilitation counseling or a related area without a supervised internship plus two years of acceptable experience, at least one year of which must have been under the supervision of a C.R.C.; or

   D. Have a master's degree in an unrelated area plus five years of acceptable experience, at least one year of which must have been under the supervision of a C.R.C.; or

   E. Have a baccalaureate degree in an area plus five years of acceptable experience, at least one of which must have been under the supervision of a C.R.C.

II. Pay an application fee.

III. Pay an examination and certification fee.

IV. Successfully pass the certification examination. This examination is a written, multiple choice test of 300 questions. It is given nationally twice a year, in April and October, and the test sites chosen are based on the geographical distribution of the test takers. If the examination is failed the first time, a retake is allowed within fifteen months with the payment of a fee. If it is failed a second time, then the applicant must go through the certification eligibility process again.

Provisional certification will be given to an individual who passes the examination and meets the education and general experience requirement, but lacks experience under the supervision of a C.R.C. However, he/she will be required to fulfill the one year of supervised experience before being granted full certification status.

RECERTIFICATION INFORMATION

Initial certification is valid for five years. In order to renew or maintain certification, an individual must:

I. Provide evidence of participation in 150 clock hours of CORE-approved continuing education over the past five years.

II. Pay a fee.

BACKGROUND INFORMATION

Rehabilitation counselors are employed in a variety of institutions and agencies. The majority work in civil service agencies; in Pennsylvania, the Bureau of Vocational Rehabilitation is the largest state employer of rehabilitation counselors. Rehabilitation counselors may also work in mental health agencies and clinics, in the area of law enforcement and corrections, in private agencies, allied health services, and community agencies.

The national certification, new in 1974, is rapidly becoming recognized as a criterion for employment in many of the above agencies and institutions. Counselor certification is required by federal regulations for intermediate health care facilities, and a number of agencies include it as a criterion for hiring and promotion. Legislation has been introduced in the United States Congress to amend the Rehabilitation Act to include the professional standards of certification.

Rehabilitation counselor educators are also affected by this national certification as it is a requirement for faculty to meet in helping to obtain and maintain accreditation of academic programs in rehabilitation counseling.

There are several national professional associations in the field of rehabilitation counseling, including the National Rehabilitation Association, the National Rehabilitation Counselor Association, and the American Personnel and Guidance Association together with its subdivision, the American Rehabilitation Counseling Association.

Three schools in Pennsylvania have CORE accredited programs in rehabilitation counseling. They are The Pennsylvania State University, University of Pittsburgh, and University of Scranton. There are approximately 335 C.R.C.s in Pennsylvania.

CLIMATE FOR CONTINUING EDUCATION

As acceptance of CORE certification continues to grow, continuing education programs will be increasingly necessary to enable individuals to maintain certification. (The first group of individuals to be certified became eligible for recertification in August, 1979.) The professional associations offer some preconference workshops in conjunction with their national conferences, but little continuing education is provided at the state and local levels. Also, a course to prepare those sitting for the certification examination has been suggested as potentially useful, but apparently there is none available in Pennsylvania.

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RESPIRATORY THERAPY

Pennsylvania has no mandatory licensure, certification, or registration of respiratory therapists. However, there is credentialing by the National Board for Respiratory Therapy on a nationwide basis.

CREDENTIALING INFORMATION

There are two levels of credentialing, certified therapy technicians and registered therapists. To be credentialed, an individual must:

I. Meet the appropriate education or experience requirements.

  A. To become a certified respiratory therapy technician, an individual must complete a one-year approved educational program beyond high school.

  B. To become a registered respiratory therapist, an individual must meet ONE of the following requirements:

    1. Complete an approved program to earn an associate degree in science or a baccalaureate degree in respiratory therapy, or

    2. Complete an associate or baccalaureate degree in a science-related field, and an intensive training program in respiratory therapy, or

    3. Have five years of experience as a certified respiratory therapist and complete thirty college credits.

II. Have one year of experience working at the appropriate level.

III. Pay an examination fee.

IV. Pass the appropriate examination, which is administered by Educational Testing Service.

  A. The certification examination is three hours in length.

  B. The registration examination has two parts. The first part is similar to the certification examination, and must be passed before taking the second part, which is a clinical simulation.

RECREDENTIALING INFORMATION

To maintain credentialing, an individual must:

I. Be actively engaged in the practice of respiratory therapy.

II. Pay an annual fee.

Continuing education requirements: none.

BACKGROUND INFORMATION

There are approximately 9,500 registered respiratory technicians and 11,000 certified respiratory therapists in the United States, and twice that many individuals practicing respiratory therapy. In Pennsylvania approximately 1,000 people practice respiratory therapy.

Respiratory therapy is a relatively new allied health field. It originated in the late 1950s, when twelve months of on-the-job training under a supervisor constituted a training program. In 1970, completion of an eighteen-month educational program became the requirement for registration. Currently about 300 schools in the country offer programs approved by the Joint Review Committee for Respiratory Therapy Education. The demand for respiratory therapists far exceeds the supply of credentialed professionals; hence many individuals who are not credentialed are hired to work as respiratory therapists.

State licensure of respiratory therapists is frequently discussed, as are certification and registration. State registration of respiratory therapists based upon the existing credentialing standards is viewed by some as a desirable form of regulation for Pennsylvania. Without any such regulation, determining third party payment is a problem. Only one state, Arkansas, licenses respiratory therapists at this time.

The American Association for Respiratory Therapy (AART) is the national professional organization, and it has a state society and seven district chapters in the Commonwealth.

Some changes are expected to take place regarding the credentialing and practice of respiratory therapists. A baccalaureate degree may be required for credentialing in the future. State regulation of some type may be prompted by third party payers, if not by the profession itself. Continuing education may be required to maintain credentials, being tied in to the yearly renewal.

CLIMATE FOR CONTINUING EDUCATION

Since at least 50 percent of those practicing respiratory therapy have had no formal education in the field, continuing education is considered important for them. Changes in the field also make continuing education desirable for all practitioners, regardless of their initial training. AART has recently developed a system called PROCEED to approve programs for continuing education unit credit and to maintain an enrollee's continuing education transcript. This procedure is somewhat complex, but will become important if continuing education is mandated for recertification. It has been suggested that Penn State could serve respiratory therapists by establishing a working relationship with AART and understanding and implementing the provisions of PROCEED.

AART provides some continuing education for its members, and several colleges in the state also offer programs. However, the need for continuing education is increasing.

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SANITARIANS

Pennsylvania has no mandatory certification or licensure of sanitarians. However, voluntary registration is provided through the Board for Registration of Sanitarians in Pennsylvania. The National Environmental Health Association (NEHA) provides national registration.

REGISTRATION INFORMATION

In order to become a Registered Sanitarian (R.S.) in Pennsylvania, an individual must:

I. Possess a baccalaureate degree from an accredited college or university, including forty-five quarter hours or thirty semester hours in the basic natural sciences.

II. Have a minimum of two years of experience as a full time sanitarian. Graduate degrees may be substituted for one year of this experience.

III. Successfully complete the Sanitarian's Registration Examination.

IV. Pay an application fee and an examination fee.

The NEHA registration plan is similar, but eliminates the experience requirement if the individual's undergraduate degree is in environmental health.

REREGISTRATION INFORMATION

Registration renewal is biennial; a fee is charged.

Continuing education requirements: none.

BACKGROUND INFORMATION

Sanitarians, who also may be called environmentalists, are persons specializing in environmental health. Their work involves the protection of human food, air, water, and shelter. Most sanitarians are employed in the public sector, but others work for private engineering firms or food service industries.

In Pennsylvania, sanitarians have a variety of occupational titles, since they are employed primarily by a variety of governmental agencies which each use different position titles. At the state level, positions are filled through the civil service system. The Department of Environmental Resources employs sanitarians and supervising sanitarians. Public health executives for the Department of Health and food inspectors within the Department of Agriculture may have environmental health backgrounds.

At the local level, positions are governed through state laws regulated by the Department of Health. Depending on the local government unit, sanitarians also may be called supervising sanitarians or health officers, but their responsibilities are similar. They are involved in the plan, review, investigation, and inspection of the following environmental programs: food service sanitation, rodent and insect control, sewage and waste water disposal, well and private water supply, noise control, solid and hazardous waste control, public bathing places, recreational campgrounds, school sanitation, air pollution control, and housing. Employment qualifications at both the state and local levels vary with each employing agency. Generally, however, an individual must have a bachelor's degree to be employed at a level higher than that of a technician.

NEHA accredits academic programs in environmental health, but currently no Pennsylvania programs are accredited. Schools which have coursework in environmental or public health include West Chester State College, Temple University, Drexel University, and University of Pittsburgh. Penn State offers environmental protection and food science programs. Although a person may become an environmental technician without a college diploma, a baccalaureate degree in environmental health or a related science is necessary for state or national registration, or for employment in many government agencies.

Over thirty states require sanitarians to be registered, but Pennsylvania does not. However, in lieu of mandatory registration, the Board for Registration of Sanitarians in Pennsylvania offers a voluntary registration program. Because Pennsylvania's registration requirements correspond to those at the national level and the examinations are identical, NEHA will register sanitarians on the basis of their Pennsylvania registration. About half of the sanitarians currently working in the state are estimated to be registered. Mandatory registration or licensure of sanitarians in Pennsylvania has been proposed but never enacted, and appears unlikely at this time.

NEHA is the largest professional association serving only environmentalists; its state affiliate, Pennsylvania Environmental Health Association (PEHA) meets annually. The American Public Health Association (APHA) has an environmental health section and the associated state organization is the Pennsylvania Public Health Association (PPHA). The Central Atlantic States Association of Food and Drug Officials (CASA) is a strong regional organization which relates to those involved in the food service sanitation field. The American Academy of Sanitarians meets in conjunction with NEHA, and has more stringent membership requirements, thus appealing more to administrators in the field. Two other organizations are the International Association of Milk, Food, and Environmental Sanitarians, Inc. (IAMFES), geared to food processing and service, and the Environmental Management Association.

CLIMATE FOR CONTINUING EDUCATION

The limited continuing education available is not coordinated or publicized extensively. A few providers include government agencies, such as the Food and Drug Administration, Pennsylvania Department of Health, and the Public Health Service, and professional associations, such as CASA and Pennsylvania Food and Drug Association. PEHA has one or two meetings per year, and NEHA's annual conference has an educational component. APHE offers publications and other written materials, as does IAMFES. West Chester State College also has offered some continuing education recently.

Cost, travel time, and interest are the primary deterrents to continuing education participation. Because many sanitarians are employed by government agencies, they are dependent on travel budgets and time allowances to attend workshops and meetings. However, budget cuts have limited such travel severely, and without agency support, sanitarians are unlikely to attend such programs. Continuing education attendance is not required for reregistration, and unless they are convinced of a potential benefit for them, many sanitarians are not motivated to participate. If there were interest in continuing education, sanitarians' needs might be met best through low cost, evening workshops in accessible locations, or through some alternative delivery system.

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SECRETARIAL PRACTICE
CERTIFIED PROFESSIONAL SECRETARIES

There is no mandatory licensure or certification of secretaries in Pennsylvania. However, voluntary national certification for professional secretaries exists through the Institute for Certifying Secretaries, a department of Professional Secretaries International (PSI).

CERTIFICATION INFORMATION

In order to become a Certified Professional Secretary (CPS), an individual must:

I. Meet ONE of these options:

A. Have a high school diploma or its equivalent, plus six years of verified secretarial experience, or

B. Have one year of postsecondary education equaling thirty credit hours, plus five years of verified secretarial experience, or

C. Have two years of postsecondary education equaling ninety credit hours, plus three years of verified secretarial experience, or

D. Have three years of postsecondary education equaling ninety credit hours, plus three years of verified secretarial experience, or

E. Have four or more years of postsecondary education equaling a minimum of 120 credit hours, plus two years of verified secretarial experience.

A full time employed secretary or college/university student may take the CPS examination prior to meeting the requirements; however, all educational and satisfactory secretarial experience must be obtained before certification is granted.

II. Pay a processing fee.

III. Pay an examination fee and a fee for each part retaken.

IV. Pass the CPS examination. This is a two-day examination which covers six broad areas: behavioral science in business, business law, economics and management, accounting, secretarial skills and decision making, and office procedures and administration. All six parts must be passed for certification. If certain parts are not passed on the first attempt, they may be retaken within the next four years, but at least one portion must be passed initially. The examination is given in May each year at various examination centers.

RECERTIFICATION INFORMATION

There are currently no provisions for recertification.

BACKGROUND INFORMATION

There are over three million persons in the United States employed in various secretarial fields. PSI, the major professional association serving their needs, was called the National Secretaries Association (NSA) until this year.

The CPS designation was instituted in 1951 by PSI (then NSA) to recognize a high level of competence in the secretarial field. This designation offers a goal for the career-oriented secretary who wants to be identified as exceptional and it establishes an accepted professional standard. The CPS can expect a higher salary and is qualified to hold a supervisory office position. The CPS is also seen as a means to upgrade the secretarial field. To date, there are 14,085 CPSs in the nation, of which 237 are in Pennsylvania. The number of CPSs is steadily increasing, nearly doubling since 1972. Currently 248 colleges in the United States and Canada will grant college credit for the CPS rating.

CLIMATE FOR CONTINUING EDUCATION

The Institute for Certifying Secretaries does not provide any type of educational courses of preparation for the examination. It does, however, offer a bibliography of recommended books that an individual may want to read for self study. Some colleges and universities, as well as private business schools, offer programs or courses of preparation for the CPS examination. For example, a series of courses have just been developed through the Independent Study Division of Indiana University School of Continuing Studies. The series consists of a combination of credit and noncredit courses which may be applied to the External Degree Program for credit towards an associate or baccalaureate degree in general studies if the individual passes the CPS exam. Penn State has initiated a professional development program for secretaries which includes six noncredit courses and can be taken as preparation for the CPS exam. A certificate is awarded to individuals who complete the course sequence. Harrisburg Area Community College also offers CPS study courses.

Once CPS certification is granted, an individual is expected to keep updated. There is a great emphasis upon continued self learning. PSI recently approved a proposal to conduct a study of CPSs on "Factors Influencing Professional Secretaries in Continuing Professional Education." This survey will be used to help PSI plan programs for continuing professional education. Local PSI chapters offer educational programs and sponsor seminars for their membership, and the Institute for Certifying Secretaries has provided annual seminars on such topics as interpersonal communications, the secretary in the management process, and career growth. An upcoming seminar will focus on the image of the secretary, the need for productivity, and compensation. Continuing education workshops have also been sponsored by Penn State, particularly through the Commonwealth campuses.

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SECRETARIAL PRACTICE
LEGAL SECRETARIES

There is no mandatory licensure or certification of legal secretaries. However, voluntary national certification is provided by the National Association of Legal Secretaries (NALS).

CERTIFICATION INFORMATION

The NALS offers a certification program for Professional Legal Secretaries (P.L.S.). This certification is an aid to the standardization and professionalization of the field.

To be certified as a P.L.S., an individual must:

I. Have five years' experience in a legal setting.

II. Successfully complete an examination. The examination is a written, two day test covering written communication skills and knowledge; human relations and ethics; legal secretarial procedures; legal secretarial accounting; legal terminology, techniques and procedures; exercise of judgement; and legal secretarial skills.

The examination is given in March and October at testing centers throughout the country. A fee is charged.

RECERTIFICATION INFORMATION

There is no recertification of P.L.S.s. Certification is good for life.

BACKGROUND INFORMATION

Legal secretaries can be employed either by attorneys or in a variety of other types of offices. For example, their legal knowledge and secretarial skills aid them in contract, government, real estate, and parole offices.

A legal secretary with more specialized training can become a legal assistant. A legal assistant is qualified to research legal documents and help write reports and briefings.

Legal secretaries generally receive their training in a formal diploma, certificate, or associate degree program at a business school or community college. If an individual works in a large law office, he or she usually receives additional on-the-job training. Experience is an important factor in being recognized as a legal secretary.

There are few P.L.S.s in Pennsylvania. The P.L.S. designation is relatively new and has not been given as much publicity as other certification opportunities in the secretarial field.

Job placement of legal secretaries is very good. Opportunities for promotion and advancement vary with the size of the law firm or the kind of business for which the individual works.

CLIMATE FOR CONTINUING EDUCATION

NALS, through its state and local chapters, sponsors legal education classes, seminars, and professional courses. A study guide and suggested bibliography for self study is published by NALS for certification examination preparation.

In addition to continuing education focused on the legal knowledge of legal secretaries, general secretarial continuing education is important to this field. Relevant programs are offered by Professional Secretaries International and the American Management Association.

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SECRETARIAL PRACTICE
MEDICAL ASSISTANTS

There is no mandatory certification or licensure of medical assistants. However, voluntary national certification for medical assistants is provided by the American Association of Medical Assistants (AAMA). This report grew out of an investigation of the medical secretarial field in which there is no certification or licensure. However, the medical secretary, when he or she takes expanded duties, is classified as a medical assistant.

CERTIFICATION INFORMATION

AAMA provides three certification categories for medical assistants. One is the general Certified Medical Assistant (C.M.A.), and two are specialty certifications, C.M.A.-Administrative and C.M.A.-Clinical.

To be certified as a C.M.A., an individual must:

I. Meet ONE of the following options:

  A. Have an associate degree or certificate in medical assisting from an approved program; or

  B. Have one year of full time experience under the supervision of a physician and a high school diploma or its equivalent; or

  C. Have five years full time experience under the supervision of a physician.

II. Pay an application fee.

III. Pay an examination fee.

IV. Pass an examination. The examination is written and covers three broad areas: general (medical terminology, basic anatomy, psychology, and law and economics); administrative procedures (oral and written communications, bookkeeping, office equipment, and insurance); and clinical procedures (examining room procedures, medications and injections, and storage and supplies).

Either or both of the two specialty designations, administrative and clinical, may be obtained. To be certified as a certified medical assistant specialist, an individual must:

I. Pass C.M.A. certification requirements.

II. Pay an examination fee.

III. Pass an examination. The administrative examination covers the three areas of communications, bookkeeping and insurance, and administrative procedures. The clinical examination covers the three areas of anatomy, laboratory orientation, and clinical procedures. Both tests are written and once a year are offered at test centers throughout the United States.

RECERTIFICATION INFORMATION

A voluntary revalidation program for C.M.A.s and C.M.A. specialists was implemented in 1980 by AAMA. This program provides for revalidation of certification on a five year periodic basis by completing one of two options: revalidation by examination or revalidation by a continuing education point method. Examinations are offered for the C.M.A. and specialty categories. A continuing education point system based on varying points for college credit and CEUs (one AAMA CEU = ten points; one college credit hour = twelve points), is defined for each category of certification. The number of required points range from fifty to 110.

BACKGROUND INFORMATION

The medical assistant is trained in office skills as they relate to a medical office, whether for the private practice of a physician or dentist, or as a hospital staff member. He or she may have the responsibilities of receptionist, bookkeeper, and office manager. In addition, the individual may prepare patients for the physician and do basic laboratory procedures such as tests for urinalysis, blood counts, and basic blood chemistry.

In Pennsylvania, several business schools and community colleges offer programs for medical assistants. These are generally two year programs leading to a diploma, certificate, or associate degree. Job placement is not a problem for graduates of medical assistant programs.

Three schools are approved by the AAMA to meet eligibility requirements for certification. They are the Community College of Allegheny County (Allegheny campus); Median School, Pittsburgh; and Central Pennsylvania Business School, Summerdale.

Although specialized training as a medical assistant may be preferred by employers, it is not necessary. Many individuals may come to the position with a general secretarial background and learn the technical knowledge on the job.

CLIMATE FOR CONTINUING EDUCATION

There are approximately 650 members of the Pennsylvania chapter of AAMA (PAMA), less than half of whom are certified. Voluntary membership in PAMA requires 150 hours of continuing education every three years. The majority of medical assistants are not members of AAMA or its state chapters. Membership in AAMA is open to anyone working under the supervision of a physician including nurses and laboratory technicians, but the majority of members are medical secretaries.

Continuing education is offered by AAMA at the national, state and local levels. All programs offer continuing education credit. The main purpose of the local and state chapters is to offer continuing education. The continuing education is developed and sponsored primarily through AAMA and its affiliates, rather than through colleges or schools of business. However, some cosponsoring of programs has occurred between the American Medical Association and Professional Secretaries International.

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SECURITIES SALES
(Registered Representatives)

Persons involved in securities sales or exchange in Pennsylvania are licensed by the Pennsylvania Securities and Exchange Commission (PSEC) and registered with the National Association of Securities Dealers (NASD) and the New York Stock Exchange (NYSE).

LICENSING INFORMATION

To be licensed by PSEC, an individual must:

I. Successfully complete the PSEC examination and the appropriate national licensing examination(s).

II. Pay a fee for each examination taken.

To be registered with NASD, an individual must:

I. Successfully complete the appropriate NASD examination. There are both general and topical examinations at the limited (entry) and principal (managerial) levels.

To be registered with NYSE, an individual must:

I. Be employed for at least four months by a member organization.

II. Successfully complete the NYSE examination under the sponsorship of a member organization.

In addition, registered representatives wishing to sell life insurance and annuities must obtain separate state licenses. The same is true for some securities transactions. Most states recognize and accept the joint industry Series 7 General Securities examination, but many also require an examination covering the laws of their own state.

RELICENSING INFORMATION

To maintain NASD registration, the registered representative must pay a standard biennial fee regardless of the levels and types of examinations taken.

Continuing education requirements: none.

BACKGROUND INFORMATION

The continually expanding product line handled by registered representatives includes stocks, bonds, insurance, annuities, and tax shelters. Registered representatives also may offer financial counseling on portfolios and market trends. They may serve all types of customers or specialize in one type of investor. They also may specialize in certain kinds of securities such as mutual funds. Entry level representatives' efforts are focused on developing a clientele and then servicing their accounts. Although they may be employed in all parts of the country by investment firms and mutual fund businesses, most work for a few large firms located in metropolitan areas.

PSEC licensure is necessary for a registered representative to accept and place orders from Pennsylvania residents. NYSE registration allows the representative to trade on that market. NASD coordinates and regulates the securities industry by administering these and other specialized examinations.

The major trade association is the Securities Industry Association (SIA) which is composed of firms representing about 95 percent of the securities business in North America. SIA provides research, lobbying, and educational services to its members. The exchanges meet some of the same needs as professional associations including registration and the setting of ethical standards.

CLIMATE FOR CONTINUING EDUCATION

The securities industry is just beginning to recognize the need for continuing education among registered representatives. SIA is one active provider of management-level training. Since 1953 SIA, in conjunction with the Wharton School of the University of Pennsylvania, has held the Securities Industries Institute (SII), a one-week per year, three-year certificate program for mid-level sales and branch managers. Coursework includes economics, finance, accounting, marketing, sales management, and human resources. The SII certificate is widely recognized in the field. SIA also sponsors regular seminars on subjects of general interest such as branch management, sales and marketing, personnel development, operations, and legal compliance. These seminars are scheduled several times per year in different urban areas.

The New York Institute of Finance prepares candidates for registration and trains practitioners in many facets of the securities industry. The Training and Examination section of NYSE consults regularly with training directors of member firms and commercial providers on the topic of how employee training is affected by the Exchange's changing examination program.

The large investment firms are the major providers of continuing education for their own employees. Merrill Lynch, Pierce, Fenner, and Smith, for example, is presently expanding its in-house professional development program. This may lead to internal certification and eventually to industry-wide certification. The training module for new employees includes textbooks, cassettes, and videotape presentations. Even though smaller firms may not have the resources to design a sophisticated package, most provide continuing education for their staffs on a limited scale. Investment firms have generally not collaborated on this point, however.

Registered representatives who work for firms with research departments benefit from the presence of financial analysts who keep them abreast of general economic conditions and the latest developments in specific industries and companies. Access to in-house training supplements their continuing education.

Basic instruction in prospecting, sales skills, accounting, computer technology, and innovative investment vehicles such as interest rate futures is always needed. Rapid changes in product mix and tax laws make continuous learning a necessity.

Potential providers of continuing education for registered representatives should recognize the unpredictable nature of the securities business and the effect that it has on representatives' attitudes toward programming. Representatives would have to feel strongly convinced of the merit of a program before making a commitment to attend. Perhaps an evening or weekend workshop or an innovative delivery mode such as public television or correspondence would be preferable to traditional programming, particularly for those in more rural locations.

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SOCIAL WORK

Pennsylvania has no mandatory licensure of social workers at this time. However, licensing efforts are currently underway, and both state and national officials of the National Association of Social Workers (NASW) describe licensure as their "most publicized issue, the one on which the greatest amount of effort is being expended."

BACKGROUND

In the past, social workers avoided the issue of licensure, stating that they didn't want to be controlled by others. However, in recent years several factors have caused practitioners nationwide to take a new look at the need for licensing. Within the last five years, the number of states licensing social workers has doubled; as of December, 1978, twenty-three states were regulating social workers. In Pennsylvania, as well as elsewhere in the nation, this move toward licensing has grown out of the following considerations:

1. The need for quality control. Many people providing social services have no formal training in social work and the quality of their work may be poor, which has a negative impact on the public opinion of social workers.

2. The need to identify individuals and agencies for third party reimbursement. With many social workers and social work agencies providing reimbursable mental health care services, insurance companies need a legal standard regarding whom to pay.

3. The need to combat the tendency of social work agencies to have low or no requirements for personnel. The theory that both public and private agencies would maintain quality of service by hiring only trained, qualified personnel has proven false. Maintenance of quality service is reported to be a greater problem with public agencies than with those that are private. However, licensure of social workers would not guarantee that such agencies would change their employment requirements.

4. The need for visibility and acceptance as a profession. Society relies on licensing as an indicator of credibility for professionals, and the social workers feel that their profession gains in status as licensing occurs.

The standards of practice for bills that have been and are being submitted for licensing in various states have been developed in cooperation with NASW. These standards include requirements for continued learning, because the national organization feels it is particularly critical that continuing education be in the introductory legislation. As licensing becomes a requirement in the various states, many practitioners who have no formal education or training in social work are licensed under a "grandfather" clause. These people need some formal training, not only to keep them up-to-date but to give them a structured exposure to the concepts behind the practice of social work.

Although legislation is currently being drafted to require licensing of social workers in Pennsylvania, NASW officials feel that the political climate and the influence of unions on the state legislature may lead to passage of a bill that the social workers themselves would not find acceptable.

There are some designations that help to fill the gap for Pennsylvania and other states having neither title nor practice legislation for social workers. The Academy of Certified Social Workers (ACSW), operated through NASW, accepts as members individuals who have at least a master's degree in social work, have had supervised work experience, and have passed an examination. Membership in ACSW increases employment opportunities, and assures the employer or client that an individual has training, experience, and some mastery of his/her profession. Another designation is found in the NASW Register of Clinical Social Workers, a listing that includes practicing social workers with at least a master's degree and five years of professional experience.

Penn State offers an accredited Bachelor of Arts degree in social welfare. In the past there was some discussion of offering a master's program, but the consensus appears to be that the existing master's programs in the state—at Temple University, University of Pittsburgh, Bryn Mawr, University of Pennsylvania, and Marywood—meet the labor market needs of Pennsylvania adequately.

CLIMATE FOR CONTINUING EDUCATION

Continuing education has always been a strong force in social work. The nature of the profession, which enables practioners to benefit from discussing their cases and sharing experiences and opinions, has no doubt contributed to interest in continuing education participation. A substantial knowledge proliferation within the field has given substance to continuing education programs held throughout the state.

Penn State recently has been involved in beginning continuing education for professional social workers by offering specialized courses in rural social work practice and in law and social work. Social welfare faculty members have also worked with public and private agencies to provide continuing education.

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SURVEYING

Professional land surveyors are licensed in Pennsylvania by the State Registration Board for Professional Engineers under the 1979 amendment to the Professional Engineers Registration Law. It is unlawful for any person to practice land surveying in the Commonwealth unless he/she is licensed and registered as a professional land surveyor.

LICENSING INFORMATION

To be licensed as a professional land surveyor, an individual must:

I. Be twenty-one years of age, of good character, and able to speak and write the English language.

II. Meet ONE of the following options:

  A. Option I

    1. Meet ONE of the educational requirements described below:

      a. Be a graduate of a four year approved course in civil engineering or surveying from an approved institution, having at least ten credit hours of surveying, or

      b. Be a graduate of an approved two year course in surveying and related areas of engineering design leading to an associate degree in surveying.

    2. Meet ONE of the experience requirements described below:

      a. If licensing occurs before 1983, have two or more years' progressive experience, or

      b. If licensing occurs in 1983 or after, have four or more years' progressive experience.

    This experience is to be in land surveying under the supervision of a professional land surveyor, or a similarly qualified surveyor.

  B. Option II: Meet ONE of the requirements described below:

    1. If licensing occurs before 1985, have six or more years' progressive experience, or

    2. If licensing occurs in 1985 or thereafter, have ten or more years' progressive experience.

This experience is to be in land surveying. Half of the time is to be spent in reasonable charge of primary land surveying functions, under the supervision of a professional land surveyor or a similarly qualified surveyor.

III. Pay an application fee.

IV. Successfully pass three written examinations prescribed by the Board, including an eight-hour National Examination in Fundamentals, four-hour National Examination on Practice, and a four-hour State of Pennsylvania Practice Examination.

An individual licensed in another state or foreign country having requirements at least equal to those in Pennsylvania may be licensed providing he/she passes the state Practice Examination.

The Board maintains a roster of all professional land surveyors licensed by the state and registered with the Board.

RELICENSING INFORMATION

Professional land surveyors must register biennially with the Board by payment of a fee.

Continuing education requirements: none.

BACKGROUND INFORMATION

The basics of surveying have not changed in many years, but recent years have brought about some changes in the rules governing the practice of land surveying in Pennsylvania. These changes have focused primarily on a tightening of the regulations to insure that those individuals licensed as land surveyors are in fact qualified by reason of education and/or experience.

Under previously existing legislation, an individual who has a baccalaureate degree in any engineering discipline and two years of surveying experience could become a licensed surveyor without examination. Thus persons licensed under these regulations were not required to have had any surveying courses.

While an individual must be licensed to work independently as a land surveyor, he/she need not be licensed to work under a licensed surveyor.

The American Congress on Surveying and Mapping is the national professional organization for surveyors, and the Pennsylvania Society of Land Surveyors (PSLS) is a state affiliate of that organization. PSLS has a number of local sections throughout the state which have technical meetings for their membership throughout the year. The national organization has annual conferences with an educational component.

CLIMATE FOR CONTINUING EDUCATION

Because of the recently passed legislation with its more stringent educational requirements for licensure, there are expected to be increased demands for surveying courses. Not only will resident instruction programs have to be modified to allow students to meet the requirement of ten course hours of surveying, but continuing education courses in surveying may become desirable for those with engineering or other degrees who wish to become licensed land surveyors.

Penn State has offered a review course for the licensing examination. With Pennsylvania's recent adoption of the national examination, such a course might be even more useful than it has been in the past.

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TRANSPORTATION AND LOGISTICS

There is no state licensure or certification for persons wishing to enter the field of logistics. However, three types of voluntary national certification exist: the Interstate Commerce Commission Practitioner designation, Certified Membership of the American Society of Traffic and Transportation, and the Certified Purchasing Manager designation available through the National Association of Purchasing Management.

BACKGROUND INFORMATION

The field of logistics is very broad and includes the areas of transportation, warehousing, packaging, procurement and purchasing, inventory control, and order processing. All of these areas are found in the industrial sector, transportation companies, the military, and government.

Although there is no licensure in the field, some sectors of the field are introducing certification. Two of the existing certifications are in the transportation sector while one is in purchasing.

The first type of certification is for the designation "Interstate Commerce Commission Practitioner." The ICC Practitioner may function as a legal counselor, representing a company in cases that come before either the federal or state regulatory agencies.

There are two options for fulfilling the ICC Practitioner's requirements:

I. A practicing lawyer who is a member of a bar needs only to sign a registry. This person is called a Paragraph A Practitioner.

II. For a layman to join the bar of the ICC becoming a Paragraph B Practitioner, he/she must:

A. Meet ONE of the following options:

1. Option 1: complete a minimum of sixty college or university credits in any field, and have a minimum of five years experience in the transportation field.

2. Option 2: hold a baccalaureate degree in logistics.

In some cases, certified membership in the American Society of Traffic and Transportation is accepted in lieu of Options 1 or 2.

B. Submit an application for evaluation.

C. Pass a written examination. This day-long

> examination is national and is developed and administered by the Interstate Commerce Commission. It is given the second Tuesday of July and February in Philadelphia and Pittsburgh, and a fee is charged.

Upon passing the examination, an individual is permanently registered as an ICC Practitioner.

Nationwide, there are approximately 8,000 to 10,000 ICC Practitioners, about 4,500 of whom are members of the Association of ICC Practitioners, their professional association headquartered in Washington, D.C. Approximately one half of the ICC Practitioners have Paragraph B status. Of the Paragraph B practitioners, only about 200 actually represent clients before an agency. Most Paragraph B practitioners use the designation to assist their employing firm or as a springboard for employment; the designation is often required for a job and usually commands a larger starting salary.

Another certification in the field of logistics is the Certified Member designation (CM) of the American Society of Traffic and Transportation (AST&T). This professional association was developed to establish standards of education, experience, and ethics among individuals in traffic and transportation.

To earn the CM designation, an individual must:

I. Be at least 21 years of age.

II. Complete four examinations by test or waiver. The examinations are in four areas: transportation economics, traffic management, general management, and a choice of either transportation law or logistics. The first three examinations may be waived if an individual has completed two or more years of course work at an accredited college or recognized vocational school within the past ten years with a grade of "C" or better in specific courses in each topic area. The fourth examination can be waived if the individual has satisfactorily completed the ICC examination within the past ten years and/or has adequate proof of membership in the bar of the ICC. There is a fee for each examination, and each is given twice a year.

III. Write an original research paper. A fee is paid when an outline of the paper is submitted for AST&T approval.

The CM is currently awarded for life, although development of a periodic update program, requiring some amount of continuing education, is under consideration.

The number of CMs is increasing, as is recognition of the program.

The federal government treats it almost as an equivalent to a baccalaureate degree and it appears that it is accepted in lieu of the education requirement for the ICC Practitioner application. Within the industry, there are a range of reactions to the CM; some companies have never heard of it and others may require it of their employees.

The third certification program was implemented by the National Association of Purchasing Management (NAPM) in 1974. Applicants for the Certified Purchasing Manager (C.P.M.) designation are evaluated on the basis of five years of experience in purchasing or materials management, or a degree from a recognized four-year college plus three years of related experience; successful completion of four examinations; years of experience; and contributions to the purchasing profession. Individuals earn points for specific accomplishments in each of these categories, and must accumulate a minimum total number of points to qualify for certification. Passing all the examinations is a requirement. The examinations cover four functions: purchasing, administration, organization, and continuing education. There are currently about 7,000 C.P.M.s nationwide.

The original C.P.M. designation is valid for five years, after which evidence of the ongoing interest in professional improvement must be submitted. This is accomplished by the accumulation of additional points from the educational and contributions sections of the C.P.M. program.

CLIMATE FOR CONTINUING EDUCATION

In Pennsylvania, Penn State is the major university or college offering a program in logistics. The Robert Morris College in Pittsburgh, an urban night school, also offers a program in transportation but it generally serves local students. Both the University of Pennsylvania and the University of Scranton offer courses in logistics. Nationally, Penn State, the University of Tennessee, and the University of Maryland are the major schools offering a logistics program.

A limited amount of continuing education is available for those individuals preparing to take the examinations for ICC Practitioner certification and for the CM designation. Nationally, about 200 individuals a year take the ICC Practitioner examination. There is currently a correspondence course available to prepare for it, but it is very outdated. A need exists for a good review course and, a correspondence course that can be updated periodically has been suggested as most suitable. A review course for the ICC Practitioner's exam is currently taught in the spring of each year at Penn State through the resident instruction program.

Preparatory materials for the CM examinations exist through AST&T. The Association has developed study guides for several of the examinations and also offers an extensive reading list for each topical area. About half of the AST&T chapters offer review programs. Consideration being given to a requirement of some type of updating for CMs could entail a continuing education requirement. The Association is also considering becoming involved in offering more continuing education if recertification requirements are established.

There are other continuing education providers among additional professional associations and organizations in the various sectors of the field of logistics. NAPM offers a variety of seminars for persons with purchasing responsibilities. The Association also provides an independent study program and videocassette courses.

The National Council of Physical Distribution Management offers extensive continuing education through its annual conference and in local chapter meetings. A continuing education need has been identified in Pennsylvania in the area of distribution, particularly because there is a great change from year to year in many areas, including law and claims.

The American Production and Inventory Control Society, with a growing membership, has created an examination series for production and inventory personnel. The Society also is very active in continuing education for individuals in this field.

Delta Nu Alpha, an educational fraternity in the industry, has a national membership of about 10,000 with the majority working in the transportation and shipping field. This association is very interested in providing educational programs for its membership but needs some help in the delivery of these programs. There are several chapters in Pennsylvania including Pittsburgh, Erie, Williamsport, Scranton and a college chapter at Penn State. The state membership is about 1,500.

Some continuing education is offered in industry; General Electric, IBM, and the U.S. Government are the three largest providers of continuing education for employees. Continuing education programs offered through other companies are limited or nonexistant. Requests have come from industry to the professional associations and colleges and universities with logistics departments to provide continuing education, primarily for updating purposes.

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TRAVEL AGENTS

There is no licensure of travel agents in Pennsylvania. Voluntary certification of experienced travel agents is available through the Institute of Certified Travel Agents (ICTA).

CERTIFICATION INFORMATION

In order to become a Certified Travel Counselor (CTC), an individual must:

I. Enroll in the ICTA Travel Management Program consisting of a core curriculum plus an approved independent study project. Core courses include business management for travel agents, marketing for travel agents, sale management for travel agents, and domestic and international tourism.

II. Successfully complete several designated examinations and papers.

III. Have at least five years' full-time employment in the United States and/or Canada in one or a combination of the following:

  a. executive, marketing/sales, or operating position in a travel agency duly recognized by industry/carrier conferences;

  b. marketing/sales position with a carrier, hotel, or wholesaler of tours;

  c. other travel-related executive position devoted to the marketing or training functions in travel related activities.

IV. Pay a specified fee for the above academic course.

RECERTIFICATION INFORMATION

There is no recertification requirement.

Continuing education requirements: none.

BACKGROUND INFORMATION

Travel agents use their specialized knowledge and skills to help clients plan and execute trips. The nature of their responsibilities depends largely on the size and specialty areas of the particular agency. If the agency is a one-person business, the agent may be involved in activities as diverse as promotion and selling to filing and itinerary planning. In a large agency several agents may share responsibility for specialty areas such as resort vacations, group tours, or professional travel, while clerks and secretaries handle much of the paperwork. Travel agents are concentrated in major population centers where the best business opportunities exist. A travel agency must have the approval of major carrier conferences, such as the International Air Transport Association for foreign travel, Air Traffic Conference for domestic travel, and Cruise Lines International Association for ocean travel, before it can earn commissions.

Although some travel agencies prefer to hire college graduates, personal qualifications and experience are often more important than academic preparation. Desirable qualities include patience, a pleasant speaking voice, a memory for details, aggressiveness, and an ability to work well under pressure. Important courses in either high school or college include physical and cultural geography, foreign languages, history, and psychology. Office and computer skills as well as business math also are considered assets.

Some of the specialized learning that occurs on the job also can take place in a classroom setting. There are a number of academic programs in Pennsylvania that prepare individuals for careers in the travel industry. Some providers, like Widener College and Montgomery County Community College, offer a two year tourism degree option. Others, like the Wilma Boyd School in central Pennsylvania, offer shorter certificate programs. Many other proprietary and vocational-technical schools provide travel training. The American Society of Travel Agents' (ASTA) own correspondence and classroom program is the only nationally-recognized educational preparation to become a travel agent.

ASTA is the major professional association for travel agents, followed in size by the Association of Retail Travel Agents (ARTA). Other smaller and more specialized organizations include the National Tour Brokers Association, the American Automobile Touring Alliance, and the Association of American Air Travel Clubs. ICTA is a state-licensed school that provides certification and professional identity for experienced travel agents as well as continuing education for its graduates and others. ICTA functions independently of all professional associations but fulfills many of the educational needs of their members.

Nationally there are over 2,400 practicing CTCs and some 3,600 more presently enrolled in ICTA programs. Since most CTCs are already owner-managers with considerable work experience, certification is more a mark of distinguished achievement than an asset in securing employment. The title does assure clients of professional competence and may enhance the agency's reputation among colleagues, carriers, and clients.

Travel agents are licensed in some states, but licensure proposals in Pennsylvania have not had the support of practitioners. Some feel that "grandfathering" exempts those who need regulation the most. Previous licensure proposals would not have mandated continuing education for travel agents.

CLIMATE FOR CONTINUING EDUCATION

ICTA recognizes the need for continuing education for travel agents and sponsors three-day seminars for its graduates and others in metropolitan areas throughout the country. The Executive Management Seminar Series is aimed at the present or aspiring owner-manager, but each has a distinct theme such as marketing strategies, stress management, and legal issues. Transportation to seminars is free to all Air Traffic Conference agents. Managers generally support employees' participation in these seminars. ICTA also charters the establishment of regional education forums at the request of at least fifteen CTC students or graduates in a local area. Education forums foster professional identity and coordinate continuing education for their members. At least two meetings must be held over a twelve month period to maintain the charter. In Pennsylvania forums have been established in Philadelphia and Pittsburgh to date. ICTA has collaborated with major travel corporations in the production of a textbook for mid-level travel agents. It will be released next year.

Some colleges and universities cooperate with local travel agencies to present continuing education workshops or extended courses in travel management; Penn State (Ogontz campus) will present such a course this spring. Resorts and carriers often sponsor trips and programs to promote their own locations or services. The major airlines deliver short courses in the use of their computer systems. Travel agents also may accompany agency-planned group tours to familiarize themselves with different locations.

Continuing education for entry and mid-level travel agents seems to be lacking, even in metropolitan areas. What little is available is targeted at people who already have substantial work experience. However, it is unclear whether agents really perceive a need for continuing education. Given the urgent, pressured nature of the travel business, programs would almost have to occur after business hours or on weekends in a very accessible location. There is a good possibility that owner-managers would support employees' participation in training if it did not interfere with their work. Possible topic areas include physical and cultural geography, interpersonal skills, use of available resources, and business math. Agency managers mentioned these as areas in which their agents may be weak.

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URBAN AND REGIONAL PLANNING

There is no mandatory licensing or certification of urban or regional planners in Pennsylvania. However, a voluntary professional certification program is provided through the American Institute of Certified Planners (AICP) of the American Planning Association (APA), the national association which is concerned with the qualifications, standards, and development of the profession.

CERTIFICATION INFORMATION

In order to be certified by AICP, an individual must:

I. Be a member of APA.

II. Meet ONE of the following options:

A. Have a graduate degree in planning from an AICP-recognized program, plus two years of professional planning experience, or

B. Have a graduate degree based on two or more years of full time graduate study, plus four years of professional planning experience, or

C. Have a baccalaureate degree in planning from an AICP-recognized program, plus four years of professional planning experience, or

D. Have a graduate degree based on one but less than two years of full time graduate study, plus five years of professional planning experience, or

E. Have a baccalaureate degree, plus six years of professional planning experience, or

F. Have ten years of professional planning experience.

III. Pay an examination fee.

IV. Successfully complete the AICP examination.

The written examination is designed to evaluate the applicant's understanding of, and ability to apply, a basic core knowledge central to the field of planning and elements of specialized areas of knowledge, as defined by AICP. The examination consists of 150 questions, and applicants are allowed three hours in which to complete it. It is developed and administered by Educational Testing Service and is given once a year, in May, in about 200 colleges and universities throughout the nation. A score equivalent to 72 percent or better is needed to pass the examination. Consideration is being given to the appropriateness and feasibility of adding an essay and/or oral component to the exam.

AICP is considering changing the education and experience requirements in the future.

RECERTIFICATION INFORMATION

Continued certification is contingent upon payment of annual APA, AICP, and local chapter dues.

Continuing education requirements: none.

BACKGROUND INFORMATION

Urban and regional planners work in many different agencies of governmental and nongovernmental organizations. They engage in physical planning, including land use, community facilities, transportation, and housing. Social planning, which includes planning and developing services for health, education, and welfare; and economic planning are other aspects of the urban or regional planner's function.

Licensing of urban planners exists in only two states, Michigan and New Jersey. This is seen as a unique movement and is not indicative of a trend toward licensing in other states. Over the past ten years, the American Institute of Planners (AIP), now part of APA, discussed the issue of licensing. This group decided not to initiate or support licensing efforts by states. AIP did decide to make acceptance for membership in the association more stringent by adding an examination requirement.

In 1978, AIP consolidated with the American Society of Planning Officials, an association of professional and nonprofessional planners including planning commissioners and mayors, to form a new organization, APA. APA membership is available for anyone interested or engaged in planning, but AICP certification is reserved for professional planners. If an individual is certified by AICP, he may use the initials "A.I.C.P." after his name as a professional designation. There are currently about 5,000 A.I.C.P.s in the nation.

APA "recognizes" schools of planning through its National Education Development Committee, but it has not yet been granted the status of an accrediting agency. APA is considering the desirability of receiving that designation. There are about ninety recognized planning programs in the nation, including the master's program in urban and regional planning at Penn State's Capitol Campus. At University Park, Penn State offers both baccalaureate and master's programs. Also, the Department of Architecture includes a planning option in its program, and the geography department is instituting one. The University of Pennsylvania has programs in urban and regional planning at the master's and doctoral levels, and the University of Pittsburgh offers master's and doctoral programs in urban planning. Many small colleges are adding planning courses, and many of the traditional urban studies programs are shifting their emphasis toward planning.

CLIMATE FOR CONTINUING EDUCATION

There are three Pennsylvania chapters of APA: Eastern, Central, and Pittsburgh Metropolitan. Many educational programs are offered by these APA chapters, particularly in the Philadelphia-Bucks County area.

AICP is in the process of developing a continuing education program for its members, as well as for other planners. Courses may be offered at national APA conferences, and at regional conferences in conjunction with APA chapters and universities.

There is a significant interest in continuing education for urban and regional planners. Some programs are offered through the Capitol Campus, but there is a need for Penn State to bring urban and regional planners, from metropolitan and urban areas, together with the appropriate faculty at both Capitol Campus and University Park.

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VETERINARY MEDICINE

In Pennsylvania the practice of veterinary medicine is regulated by the Veterinary Medicine Practice Act of 1974. Under this Act, the Pennsylvania State Board of Veterinary Medical Examiners licenses qualified individuals to practice veterinary medicine.

LICENSING INFORMATION

To be licensed to practice veterinary medicine, an individual must:

I. Be eighteen years of age or over.

II. Be a graduate of an approved school or college of veterinary medicine.

III. Pay an application fee and an administration fee to take the examination. This fee must be paid each time the written examination is taken, but allows for one repeat of the oral examination.

IV. Pass an examination administered by the Board. The examination includes a national, written examination, a written clinical competency section, and an oral section administered by the Pennsylvania Board.

Foreign graduates must complete the American Veterinary Medical Association (AVMA) Education Commission for Foreign Veterinary Graduates program before being eligible for licensing.

Licensure is not required of doctors of veterinary medicine (D.V.M.) who are engaged only in teaching and research and hence do not actually practice veterinary medicine. A D.V.M. employed by federal government need not be licensed by Pennsylvania to perform his official duties within the Commonwealth.

RELICENSING INFORMATION

Licenses are renewed biennially with the payment of a relicensing fee. Licenses expire November 30 of each even-numbered year.

Each license holder is required to attend eight clock hours of educational programs in the twenty-four months preceding each renewal date.

BACKGROUND INFORMATION

Most veterinarians in Pennsylvania work with small animals, many work with both small and large animals, and relatively few limit their practices to large animals. In the past, all veterinary students received the same training regardless of their preferences for large or small animals work, but within the past decade this has changed. At most schools of veterinary medicine students now take a core of common courses and then select from options in the areas of small or large animals, research, or other interests.

After completing veterinary school, a D.V.M. may undergo additional training to specialize in a species (e.g., bovine, equine) or a dicipline (e.g., pathology, surgery). National board certification is granted in a number of specialty areas as well as passage of an examination. Some specialty boards require continuing education for maintenance of board certification. Board certification in a specialty area is a professional designation and as such is voluntary; a D.V.M. may limit his/her practice to a specific area without being board certified.

The American Veterinary Medical Association (AVMA) is the national professional organization for D.V.M.s. Within AVMA there are a number of interest and specialty groups, including those for specialty certification described above. The largest of these groups is the American Animal Hospital Association, an interest group for veterinarians working with small animals. While this group has no specific educational requirements or examination for membership, it does have standards that must be met by any D.V.M. wishing to join. The primary purposes of this group are the provision of continuing education programs and encouragement in the upgrading of animal hospitals.

The Pennsylvania Veterinary Medical Association (PVMA) is a constituent association of AVMA and serves as the parent organization for fifteen local assocations and provides leadership for the profession within the state. Nearly 1,000 of the approximately 1,200 veterinarians licensed to practice in Pennsylvania are members of PVMA.

The licensing examination for veterinarians is considered fairly difficult. Applicants from foreign schools of veterinary medicine often have trouble passing it because their training does not include all that is offered by schools in this country. Each state using the national examination determines its own passing grade. Use of the national examination by many states is an aid in establishing reciprocity for practice.

The supply of veterinarians is approximately equal to the demand in the country at this time. However, a study of veterinary manpower needs, conducted by Arthur D. Little for AVMA in 1978, indicates that there will be a surplus of doctors of veterinary medicine within a decade, given the output of existing veterinary schools. It has been suggested that in the future D.V.M.s could fill research and government positions that are currently filled by biologists or are unfilled and in which a D.V.M. would be an asset.

Within the past ten years, animal technicians have gained recognition as an occupational group within the veterinary medicine field. Prior to the 1970s, a veterinarian might train a person to work with him in the role of an animal technician, but there was no uniformity or cohesiveness to animal technicians as a group. PVMA has worked cooperatively with the animal technicians to help them establish a statewide professional organization, which meets each year at the same time and location as PVMA. Certification of animal technicians is a provision of the Veterinary Medicine Practice Act, and will be handled by the State Board. Educational requirements will include completion of a two-year training program and supervised practical experience. Animal technicians may do many of the things a veterinarian does, working under the supervision of a D.V.M., exclusive of diagnosis and surgery.

CLIMATE FOR CONTINUING EDUCATION

AVMA, PVMA, and the local associations in Pennsylvania all offer continuing education for practicing veterinarians in abundance. Difficulty filling some programs indicates that more continuing education may be offered than is necessary to meet the demand. Consolidation of programs both within the state and with neighboring states has been suggested as a means of increasing attendance and encouraging optimum program quality.

The University of Pennsylvania, which has the only school of veterinary medicine in the Commonwealth, works with PVMA on continuing education programming. Two veterinarians in the Cooperative Extension Service at Penn State provide programs that are attended by veterinarians, but work primarily with people owning, raising, and breeding animals. There is little need for further input from Penn State in the continuing professional education of practicing D.V.M.s at this time. However, should the predictions of the Arthur D. Little report come to pass, Penn State might well help veterinarians prepare for positions in allied fields, such as the biological sciences in which advanced degrees as well as the D.V.M. are required.

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SYNOPSES

The following synopses address nine additional fields which meet the criteria for inclusion in this study but were judged appropriate for more abbreviated reports for one or both of the following reasons:

1. The number of practitioners in Pennsylvania is small.

2. The field is an emerging one, and as such has not developed uniform credentialing. In some cases, regulatory legislation is pending.

As with the information presented in the preceding summaries, the synopses are intended to serve as aids to continuing educators as they identify and work with continuing professional education target groups.

Actuarial Science

There is no mandatory licensure or certification of actuaries in Pennsylvania. However, the federal Joint Board for the Enrollment of Actuaries provides the designation of Enrolled Actuary for pension actuaries. The Pennsylvania Insurance Department also requires actuaries performing specific functions to meet particular standards.

Actuaries design insurance and pension plans that can be maintained on a sound financial basis. They may work for insurance companies, insurance rating organizations, and governmental agencies or may be employed as consultants who set up pension and welfare plans for private companies, unions, and government agencies. Within the insurance field actuaries might specialize in the property/casualty field or in life and health insurance.

The primary means by which an actuary gains professional status is through a series of examinations offered by three major actuarial societies: Society of Actuaries (SOA), Casualty Actuarial Society (CAS), and American Society of Pension Actuaries (ASPA). Initial membership in each society is attained by passing a specified number of examinations, but full membership, or fellowship, is not attained until all examinations offered by the specified society are completed successfully. Although a baccalaureate degree is not required to sit for the examinations, in practice most actuaries have college backgrounds with concentrations in mathematics, business, statistics, or actuarial science. Employability is greatly enhanced if at least two examinations are taken before graduation. Initial professional society membership is a necessity, but not all actuaries continue the examination process to the fellowship level.

In order to work in the pension field, an individual must obtain enrollment under the Joint Board. Enrolled Actuaries can certify that pension plans under the jurisdiction of the Employee Retirement Income Security Act of 1974 (ERISA) meet the minimum employer funding requirements. Enrollment is obtained by passing basic and pension examinations co-sponsored by the Joint Board and professional societies and having three years of responsible pension actuarial experience. The Joint Board determines its own passing scores for the examinations.

In addition to joining a professional society, most actuaries become members of the American Academy of Actuaries (AAA), the umbrella organization for all of the societies except ASPA. Membership in the Academy (M.A.A.A.) is comparable to national certification, and requires three years of responsible actuarial experience and initial membership in one of the affiliated professional societies. Enrolled Actuaries under ERISA provisions are also eligible.

Pennsylvania actuaries who certify the solvency of municipal pension plans must meet Pennsylvania Insurance Department requirements which specify that an actuary must be an M.A.A.A., as must actuaries who sign the annual statements of life insurance companies. Nonmembers of

AAA may demonstrate equivalent education and experience requirements to the Department.

Most of the continuing education opportunities for actuaries are provided by the professional societies. SOA, CAS, and ASPA all offer home study materials, journals, and study clubs in major cities to prepare individuals for the actuarial examinations. The societies each have several conferences yearly as well, and most have initiated seminars and workshops. There are some regional and metropolitan actuarial clubs, such as one in Philadelphia, which hold meetings with educational components. A few for-profit organizations also provide continuing education. Such professional development activities are important for actuaries, since they must remain aware of legislative, economic, and health trends. Current, practical information on small pension plans is of interest to pension actuaries. Because there are fewer than 10,000 actuaries in the nation, and many represent clients throughout the country, they are willing to travel out of state to continuing education events. Many actuaries indicate a preference for attending programs sponsored by the professional societies, and feel that it would be difficult for most universities to attract the widely recognized speakers needed to compete with current continuing education providers.

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Athletic Coaching

There is no mandatory licensure or certification of athletic coaches in Pennsylvania.

The information included in this report focuses primarily on secondary school athletic coaches but is also relevant to coaches working in higher education or professional settings. Until recently, individuals hired by school districts as part time athletic coaches were required to be certified through the State Department of Education. As of March, 1980, this requirement and the state certification program were eliminated in order to allow school districts greater flexibility in employing coaches. However, districts must give first hiring priority to certified staff members employed within the district. Also, all coaches recommended for hiring should meet specified criteria of the State Board of Education. These criteria state that coaching preparation should include first aid which emphasizes preventing athletic injuries, and knowledge of principles related to training and conditioning for sports. In addition, coaches should have an understanding of school and community responsibility. School districts now will assume the responsibility of reviewing an applicant's credentials and assessing the adequacy of each individual's qualifications.

Although certification for coaches no longer exists, it is felt that most colleges and universities offering academic preparation will continue to offer coursework in correspondence with the former certification requirements. The programs generally include academic credit in first aid and athletic training and conditioning, coaching techniques, kinesiological and physiological foundations of teaching, socio-cultural foundations, and human growth and development.

The demand for coaches is greater than the supply, which is one reason the certification requirement was eliminated. Because of this demand an individual may be hired to coach on the basis of his or her coaching record rather than because of formal training in the field.

Educators express concern that coaches may lack not only foundational training, but also may be substantially outdated in their knowledge of new developments and techniques for training and health care. Coaches appear to be interested in coaching clinics that deal with game strategy, plays, weight lifting programs, etc. rather than health care, dealing with injuries, and related topics. These clinics are usually offered by independent non-profit associations or groups.

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Career Counseling

There is no mandatory licensure or certification for career counselors in Pennsylvania. Voluntary certification is available through the Pennsylvania Professional Counselor Certification Board of The Pennsylvania Personnel and Guidance Association (PPGA).

Career counselors may practice privately or be employed by educational institutions and social service agencies to help clients plan satisfying career/lifestyles. Most career counselors possess a master's degree in counselor education or counseling psychology. Experience in business and industry, especially personnel management, is also highly valued by the employers of career counselors. There is no formal credentialing in the field at this time. Further information on the certification and proposed licensure of counselors in general can be found in the synopsis on Mental Health Counseling.

The major professional associations for career counselors are the American Personnel and Guidance Association (APGA) and its Pennsylvania affiliate, the Pennsylvania Personnel and Guidance Association (PPGA); the National Vocational Guidance Association (NVGA); the American College Personnel Association (ACPA) and its Pennsylvania affiliate, the Pennsylvania College Personnel Association (PCPA); the College of Placement Council (CPC); and regionally, the Mid-Atlantic Placement Association (MAPA).

National and regional professional associations and private consulting firms offer a wide variety of continuing education opportunities for career counselors. In addition, many institutions provide in-house staff development for counselors. Some institutions also provide training for staff members of nearby colleges and universities. At this time, continuing education is voluntary. However, the pending counselor licensure bill would require all counselors in private practice to participate in continuing education in order to maintain their licenses. There is great interest and enthusiasm for continuing professional education among career counselors but limited resources to make it possible. Current areas of interest include counseling the non-traditional student, computerized career counseling, and developing a career resource center.

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Dental Assisting

There is no mandatory certification or licensure of dental assistants. However, voluntary certification is provided through the Dental Assisting National Board.

Dental assistants work with dentists as they examine and treat patients. They also perform a variety of duties that do not require the dentist's professional knowledge and skill. Pennsylvania's Dental Law Rules and Regulations specify the duties which a dental assistant cannot perform; any duty that is not specifically mentioned can be handled by a dental assistant, provided that he/she is under the direct supervision of a dentist. Most dental assistants are trained on the job, but an increasing number attend formal postsecondary school programs which are offered primarily at junior and community colleges or vocational technical schools. Eleven Pennsylvania schools have dental assisting programs which are accredited by the Commission on Dental Accreditation.

Certification is obtained through education or experience and an examination. There are over 800 Certified Dental Assistants (CDAs) in Pennsylvania. Both the American Dental Assistants Association (ADAA) and the Pennsylvania Dental Assistants Association (PDAA), its state affiliate, strongly endorse certification. The Pennsylvania Dental Association has passed a resolution that member dentists employ only CDAs and compensate them accordingly. However, this resolution is not binding and some dentists continue to hire untrained assistants.

ADAA and PDAA are affiliated with local dental assistant organizations, and membership is tripartite. However, because many rural areas in Pennsylvania do not have local associations, dental assistants from these regions join only PDAA and ADAA.

Continuing education is one way of maintaining certification, and local dental assistant associations are mandated by ADAA to provide at least six hours of continuing education programming per year. National and state meetings also offer opportunities to obtain continuing education credits. Educational institutions also provide continuing education programming, but attendance is sporadic at such programs.

Participation in continuing education is most likely if employers pay registration fees and encourage attendance. Dental assistants indicate an interest in learning current dental techniques, pharmacology, and forensic dentistry. Evening or weekend workshops would probably attract more participants than programs held during working hours.

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Financial Analysis

There is no licensure of financial analysts in Pennsylvania.

Voluntary certification is provided by the Institute of Chartered Financial Analysts (ICFA) which is associated with the Financial Analysts Federation (FAF).

Financial analysts are professionally engaged in investment management and securities research analysis. The preferred academic preparation for an analyst position is a baccalaureate degree in finance or economics. Financial analysts may work in bank trust departments, insurance companies, merger and acquisitions departments of major corporations, or firms dealing in securities, mutual, or pension funds. There are an estimated 450 FAF members in Philadelphia and another 250 in Pittsburgh.

The major professional association for financial analysts is FAF. Its associate organization, ICFA, administers a series of three examinations that certify analysts at three progressively sophisticated levels of knowledge. The seven fields of knowledge covered by the examinations are ethical and professional standards, financial accounting, quantitative techniques, economics, fixed income securities, equity securities, and portfolio management. The Chartered Financial Analyst (CFA) designation is widely recognized as a mark of professional distinction.

FAF holds an annual conference that focuses on professional development, as well as periodic seminars and symposia throughout the country. Local member societies of FAF, such as Financial Analysts of Philadelphia, Inc. or the Pittsburgh Society of Financial Analysts, Inc., meet regularly for educational purposes, as do CFA study groups. Each year FAF sponsors three formal study programs in cooperation with selected universities and publishes a professional journal for members.

Financial analysts report an eagerness to cooperate with educational institutions in providing continuing education for their colleagues. Topics of special interest include interest rate futures and other new financial instruments, mortgage-backed securities, mathematical modeling of investments, and industry updates.

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Health Planning

There is no mandatory licensure or certification of health planners in Pennsylvania.

Health planners may work for public health departments, health insurance companies, emergency medical services, hospitals, or private consulting firms. Many health planners are employed by health systems agencies (HSAs). HSA planners develop and implement a Health Systems Plan approved by the regional health planning board in accordance with federal and state legislation. One of their major responsibilities is the review of existing or proposed facilities to determine public need. HSA planners also identify health problems, provide technical assistance to other organizations, develop programs, and maintain an inventory of existing services as well as a data base for decision-making, community education, and organization activities.

Educational requirements for health planners are not uniform due to the emerging nature of the occupation. The preferred preparation is a master's degree in public health or health planning and administration, such as that offered by the Penn State program. More technical positions may require more specialized education.

The major health planning professional associations are the American Health Planning Association (AHPA) and the American Public Health Association (APHA). Both AHPA and APHA offer continuing education for health planners. However, the primary sources are regional training centers, called Alpha Centers for Health Planning, which receive support from the same federal agency (Department of Health and Human Services) that funds the HSAs and the Applied Statistics Training Institute (ASTI) courses. ASTI courses are sponsored by the National Center for Health Statistics. The Maryland-based Alpha Center is charged with providing technical and policy assistance and educational materials to health planners within the Mid-Atlantic region. In addition to maintaining an extensive list of publications, the Alpha Centers and ASTI program sponsor frequent educational programs on topics ranging from financial analysis to political action and health planning.

HSA planners are keenly interested in continuing education to update and improve technical skills; however, severe budget cuts and a heavy workload prohibit their participation in all but the least expensive and time consuming programs. Suggested topics of interest include cost containment, statistical techniques, hospital financing and services, management skills, planning methodologies, group dynamics, community organization, and competition in health care.

RESOURCE PERSON: Mr. William R. LePage
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Marriage and Family Therapy

There is no licensure of marriage and family therapists in Pennsylvania. Voluntary certification is provided by the American Association of Marriage and Family Therapy (AAMFT) through its Pennsylvania affiliate, the Pennsylvania Association of Marriage and Family Therapy (PAMFT).

Marriage and family therapists help married couples and families through pastoral counseling, clinical or counseling psychology, and social work. Many therapists who are also psychologists, social workers, or clergy are credentialed in their primary profession. However, there are an estimated 1,500 uncredentialed marriage and family therapists practicing in Pennsylvania. A proposed counselor licensure bill would require those therapists engaged in private practice to be licensed.

An estimated 320 Pennsylvania practitioners are presently certified by PAMFT. Certification requires a master's or doctoral degree in marital and family therapy from an institution accredited by AAMFT or a master's or doctoral degree in an allied mental health profession. By 1984 all candidates will be required to complete an AAMFT-approved course of study as well as a specified number of supervised counseling hours. The University of Pennsylvania and the Philadelphia Marriage Council co-sponsor a certification program for students who already hold related degrees. AAMFT certification serves as the primary credential in states which do not have licensure.

The major professional associations for marriage and family therapists are AAMFT, PAMFT, the American Psychological Association, the American Association of Counseling Psychologists, and the National Institute of Marriage and Family Relations.

Continuing education for credit is offered at national, regional, and divisional meetings. Continuing education units also can be earned through reciprocal agreement with other professional associations that are providers. Topics offered have included delinquency and family systems, and intergenerational separation. There is a strong interest among practitioners in specialized training that supplements their basic academic background.

RESOURCE PERSON: Dr. John Mackey
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Mental Health Counseling

There is no licensure of mental health counselors in Pennsylvania.

Voluntary certification for all counselors is provided by the National Academy of Certified Mental Health Counselors (NACMHC) of the American Mental Health Counselors Association (AMHCA). The Pennsylvania Personnel and Guidance Association (PPGA) also certifies counselors through the Pennsylvania Professional Counselor Certification Board.

Mental health counselors work in a wide variety of settings including educational institutions, community agencies, and private practice. College student personnel workers, social workers, or clergy may all be involved in mental health counseling. Most counselors have completed a master's degree in counselor education, counseling psychology, or a related area.

Counselor certification is an asset for those who wish to enter private practice and are not otherwise credentialed. NACMHC certification requires a combination of academic preparation and supervised counseling experience. There is a national examination, but no requirement for continuing education. PPGA certification requires a minimum of nine hours of continuing education every three years. A proposed counselor licensure bill would include mandatory continuing education for all counselors in private practice. There are an estimated seven to eight thousand counselors in Pennsylvania who would be affected by the passage of this bill.

The major professional associations for mental health counselors are all divisions of the American Personnel and Guidance Association (APGA), including the American Mental Health Counselors Association (AMHCA); the American School Counselors Association (ASCA); the Association for Counselor Education and Supervision (ACES); the American College Personnel Association (ACPA); and Pennsylvania affiliates, the Pennsylvania College Personnel Association (PCPA) and the Pennsylvania Association of Mental Health Counselors (PAMHC). PPGA is the Pennsylvania affiliate of APGA.

Mental health counselors have a myriad of opportunities for professional development, primarily through their national and regional associations. The most active providers of continuing education for Pennsylvania counselors are PPGA and ASCA. PPGA programming is designed to help members fulfill their certification obligations. Leaders are eager to cooperate with educational institutions in providing workshops and seminars. If counselors become licensed in Pennsylvania there will be an increased need for coordination among diverse regional providers such as individual institutions and agencies, associations, and private consulting firms.

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Municipal Clerks and Secretaries

There is no mandatory licensure or certification of municipal clerks or secretaries in Pennsylvania. Voluntary certification is provided through the International Institute of Municipal Clerks (IIMC).

Persons employed as municipal clerks in Pennsylvania generally are called township or borough secretaries, or city or county clerks. These appointed positions may be part or full time, depending on the size of the municipality. Responsibilities vary significantly, but usually include maintaining official records, council minutes, and ordinance and resolution books; answering inquiries from other departments and citizens; countersigning official documents; and preparing for council meetings. Clerks in communities without a municipal manager often assume many more administrative responsibilities than those employed under an administrator. Some persons hold titles such as "secretary/manager" which recognize the dual nature of their positions.

There is no standard academic preparation for municipal clerks or secretaries, and many obtain jobs on the basis of previous municipal work experience. IIMC's certification program leads to a Certified Municipal Clerk (CMC) designation, and is designed to increase the professionalism of municipal clerks and secretaries. Certification requirements include education and experience; the satisfactory completion of an IIMC-approved Municipal Clerks' Institute fulfills one educational requirement option. (Penn State offered such a program in 1979, but due to under-enrollment only one of the three courses was held.) Currently, clerks or secretaries wishing to obtain certification must attend an Institute out of state or meet alternate educational requirements.

The state professional association is the Pennsylvania Local Governmental Secretaries Association. Persons holding joint secretary/manager designations may be eligible to join the International City Management Association and the Association of Pennsylvania Municipal Managers.

IIMC strongly encourages continuing education, and its members are asked to undertake individual programs of professional development. CMCs may join the IIMC Academy for Advanced Education by participating in continued education of various sorts. Membership is maintained by demonstrating continued professional growth. IIMC holds annual conferences with educational sessions. In Pennsylvania, municipal clerks and secretaries who wish to remain updated in their field may take advantage of programs presented by the Department of Community Affairs. The Pennsylvania Local Government Secretaries Association also holds training conferences and meetings.

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BIBLIOGRAPHY

Adams, Charles F. and Mecca, Thomas V. "Occupational Education: Some Possible Futures." World Future Society Bulletin, January-February, 1980: pp. 11-18.

Angel, Juvenal L. Directory of Professional and Occupational Licensing in the United States. New York: World Trade Academy Press, Inc., 1970.

"Architects/Engineers: Economy Pinches, Turf Wars Abound." ProForum, Vol. 3, No. 8 (1981): pp. 7-8.

Boissunezu, Robert. "The Impact of Mandatory Continuing Education." Hospital and Health Services Administration, Summer, 1979: pp. 54-61.

"Child Care: An Emerging Profession." ProForum, Vol. 3, No. 4 (1980): p. 5.

"Choose One: Continuing Eduation Does/Does Not lead to Continuing Competency." ProForum, Vol. 2, No. 4 (1979): p. 5.

"Counselors' Certifier Sets Recertification Standard." ProForum, Vol. 3, No. 4 (1980): p. 10.

Forni, Patricia R. "Continuing Education vs. Continuing Competence." Journal of Nursing Administration, Vol. V, No. 9 (1975): pp. 34-38.

Frandson, Phillip E. "Continuing Education of the Professions. Issues, Ethics and Conflicts." The NUEA Spectator, Vol. 39, No. 21 (1975): p. 5-10.

Frandson, Phillip E. "Greater Role Urged for Universities." Los Angeles Times, September 28, 1975.

Froke, Marlowe D., ed. "Final Report of the Committee on Continuing Professional and Occupational Education." Mimeographed. State College, Pennsylvania: The Pennsylvania State University, 1977.

Gross, Stanley J. "The Myth of Professional Licensing." American Psychologist, Vol. 33, No. 11 (1978): pp. 1009-1016.

Grotelueschen, Arden D., and Gaulloy, Darrel N. "A Rationale for Studying Determinants of Intention to Participate in Continuing Professional Education." Mimeographed. Urbana, Illinois: University of Illinois at Urbana-Champaign, 1979.

Grotelueschen, Arden D.; Kenny, William R.; and Harnisch, Delwyn L. "Research on Reasons for Participation in Continuing Professional Education: A Statement of Position and Rationale." Mimeographed. Urbana, Illinois: University of Illinois at Urbana-Champaign, 1979.

Houle, Cyril O. *Continuing Learning in the Professions*. San Francisco: Jossey-Bass Publishers, 1980.

Illinois Council on CME. *Physicians Improve Performance through Continuing Education - Eight Research Reports*. Chicago, Illinois, 1980.

Jacobs, Jerald A. "Professional Credentialing by Associations: Some Cases and Guidelines." *Association Letter*, February, 1979: pp. 3-6.

Kalman, Samuel H. "Continuing Professional Competency." Paper presented to the National Council of Engineering Examiners, Norfolk, Virginia, August 7, 1979.

Kalman, Samuel H. "Where is the Continuing Education Ballgame Being Played? Viewpoint of Professional Groups." Paper presented at the annual meeting, Council on Extension and Continuing Education, NASULGC, St. Louis, Missouri, November 13, 1976.

Knox, B. Alan. "Strategies for Conducting Continuing Professional Education." Paper presented to the National Adult Education Conference, Boston, Massachusetts, November 7, 1979.

Lindsay, Carl A. and Toombs, William E. "Continuing Professional Education and the University: The Practice Audit Model as a Process for Needs Assessment and Program Development." Paper presented at the Conference of The American Association for Higher Education, Washington, D.C., March 4, 1980.

"Mandatory Continuing Education on 'Shaky Foundation' says Shimberg." *ProForum*, Vol. 3, No. 4 (1980): p. 6.

Mellcar, George. "Continuing Education for the Professions." Paper presented at the annual meeting of the Association for Continuing Higher Education, Toronto, Ontario, November 8, 1979.

Morris, Albert J. "The Return on Investment of Continuing Education of Engineers: The Executive Summary of the Final Report." Genesys Systems, Inc., Palo Alto, California, June, 1978.

Nead, Benjamin M. "Continuing Education Requirements in the Professions and Trades." Mimeographed. State College, Pennsylvania: The Pennsylvania State University, 1974.

"Newsletter on Continuing Legal Education." *ProForum*, Vol. 3, No. 2 (1980): p. 9.

"NIAAA Funds Alcoholism Counselor Credentialing Project." *ProForum*, Vol. 2, No. 11 (1980): p. 4.

"Nursing Home Administrators: A Profession by Mandate." *ProForum*, Vol. 3, No. 9 (1981): pp. 7-8.

Pennsylvania Laws, Statutes, etc. *Purdon's Pennsylvania Consolidated Statutes Annotated*. Philadelphia: George T. Bisel Company, 1968, updated to 1977-78.

"Pharmacists Take Initiative in Assuring Competence." *ProForum*, Vol. 2, No. 2 (1979): pp. 4-5.

Phillips, Louis E. "Professional Training: A National View." Paper presented at the Lifelong Learning Conference, Columbus, Ohio, March 12, 1980.

Pitchell, Robert J. "National Occupational Certification and Continuing Education." *The PER Special Report*, Vol. 1, No. 6, January, 1978.

Pottinger, Paul S. "Competence Testing as a Basis for Licensing: Problems and Prospects." Paper presented at the Conference on Credentialism, University of California Law School, Berkeley, California, April, 1977.

Pottinger, Paul S. "Competencies for Complacency." *ProForum*, Vol. 2, No. 7 (1979): pp. 7-8.

Queeney, Donna S. "Continuing Professional Eduation: One State's Perspective." Paper presented at the Lifelong Learning Conference, Columbus, Ohio, March 12, 1980.

Queeney, Donna S. and Manz, Karen P. "Continuing Education Vital to Professions." *Continuing Education News*, Vol. 56, No. 3 (1980): pp. 1-3.

Queeney, Donna S. and Manz, Karen P. "Professional and Occupational Practice Requirements: Some Implications for Continuing Higher Education." Paper presented at the National Adult Education Conference, Boston, Massachusetts, November 7, 1979.

Roederer, Doug. "Historical Overview on Occupational Licensing: A New Direction in Occupational Licensing." Paper presented at the Hyatt Regency Hotel, Lexington, Kentucky, February 1, 1979.

Shimberg, Benjamin S. "Continuing Education and Licensing." *Relating Work and Education: Current Issues in Education 1977*, Dyckman, W. Vermilye, (ed.) San Francisco: Jossey-Bass Publishers, 1977.

Shimberg, Benjamin S. "The Changing Role of State Governments in Occupational Regulation." Paper delivered before the Second National Conference on Occupational and Professional Regulation, Chicago, Illinois, May 18, 1978.

Shimberg, Benjamin S. and Roederer, Doug. *Occupational Licensing: Questions a Legislator Should Ask*. The Council of State Governments, Lexington, Kentucky, March, 1978.

"State Funeral Director Regulations Ripe for Reform." *ProForum*, Vol. 3, No. 7 (1980): pp. 6-8.

Stern, Milton P. "The Politics of Continuing Professional Education." Paper presented at the annual meeting of the National University Extension Association, St. Louis, Missouri, April 12, 1976.

Talbott, John A. "Opposition to 'Coercive Continuing Medical Education and Mandatory Recertification.'" *American Journal of Psychiatry*, Vol. 136, No. 7 (1979): pp. 923-926.

Watkins, Beverly T. "Continuing Education for Professionals." *The Chronicle of Higher Education*, Vol. 19, No. 1 (1979): p. 9.

Zerlaut, Gene A. "Case Against Licensing." *Chemist*, October, 1975.

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